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AROUND THE LAKES.

CHICAGO.

Special to the Marine Record

The Chicago life saving crew covered themselves with glory by pulling twenty miles through a terrible sea to rescue a crew of shipwrecked sailors from the schooner Stampede. The Stampede left Chicago last Saturday for a cargo of cedar and was 150 miles down the lake when the furious northern gale and blinding snowstorm set in. Off Sheboygan she came to anchor, but as the gale increased in violence the cables parted and the vessel was driven helplessly before the storm. Sail after sail was set and blown away, until only a few shreds clung to the dismantled gaffs and booms. A tremendous sea that nearly engulfed the struggling schooner boarded her, carried away the yawl and flooded the cabin. Covered with ice and almost frozen, the crew climbed into the rigging and lashed themselves securely to prevent being washed away. Shortly after midnight the lights of Chicago were sighted and torches were burned in hopes of attracting attention. The lookout on top of the life saving station saw the signal, but the vessel was too far off land to be reached with the lifeboat, and believing she simply wanted a tug to tow her in, the lookout called to the tug Bob Teed. The tug went out, but after cruising around for half an hour without seeing anything of the vessel, returned to the harbor. At daylight the Stampede struck the beach twenty miles south of Chicago, and shortly after was discovered by a number of farmers. They had no boat and were unable to render any assistance, as the wreck was nearly a mile from shore. On board the vessel was a large Newfoundland dog that belonged to the captain. The end of a long rope was made fast to his neck and he was flung overboard in hopes that he would swim ashore with it, but the dog refused to swim through the surf and was finally hauled back to the vessel. Then one of the farmers mounted a horse, road to South Chicago, and telephoned here for the life saving crew. Captain St. Peter lost no time in getting the surf boat ready and after pulling through the icy seas for seven hours they reached the wreck at a little after 4 o'clock in the afternoon. In the meantime a farmer named Scavenger had driven three miles up the shore, procured a boat and had succeeded in getting close enough to the wreck to pick up the end of a hawser, which he carried ashore and made fast to a tree. The crew then rigged what the sailors call a "cockswain chain" and two of them had been hauled ashore when the life savers arrived and took off the other five. Almost perishing from exposure, the ship wrecked crew were at once conveyed to Farmer Scavenger's house and hospitably entertained. The life saving crew leaving their boat in charge of two men, took the first train for Chicago, reaching here at a late hour. The captain will come here and make arrangements for a wrecking expedition to release his vessel. The Stampede measures 280 tons, hails from Sheboygan, and is valued $6,000. She was built at Huron by McDonald in 1862, rebuilt in 1873, owned by Gibbs and classed A2½. Captain Buchanan, of the wrecked schooner Stampede, arrived here and made arrangements with Dunham to send two tugs to release his vessel. The hull is but slightly damaged, and she can be released if the weather is favorable. Captain Buchanan says his vessel was within a few feet of the Chicago breakwater Sunday morning, and that when he burned a torch he saw the tug Bob Teed leave the harbor to tow his vessel in. When the tug turned back he got out a lot of bed clothes, saturated them with oil and made a blaze, that could have been seen ten miles. He is sure the crew of the tug saw his vessel, but thinks they expected he would let go the anchors and wait until daylight to be towed in. Unfortunately the Stampede had lost both anchors and was at the mercy of the wind and sea.

The steamer J. W. Westcott, which sunk recently off the marine hospital, was discharged from drydock Monday.

Captain John Prindiville received a dispatch from the captain of the propeller Pacific, in which he says the steamer went on the beach at a point about thirty miles west of White Fish Point, on Lake Superior. The captain reports that the vessel is pretty hard on, but has no apprehension of her pounding to pieces unless the wind and sea heighten. The propeller Pacific is insured in the Buffalo hull pool for $15,000. She was lumber laden for a Lake Michigan port.

Captain McPherson, of the Canadian schooner Richard Morwood, arrived at Marquette Tuesday and telegraphed Keith & Carr that his vessel is ashore on Grand Island, Lake Superior, fast going to pieces, and that he had abandoned her as a total loss. She is laden with kerosene oil from Cleveland. The Morwood hailed from St. Catharines, is thirty-one years old, valued at $6,000, and insured through Keith & Carr's agency for $3 500.

There is no foundation for the report that a large vessel is lying off Kenosha partly submerged. The wreck reported by Captain Gilmore is the little gravel hooker Edna, which sunk several weeks ago. The tug Kittie Smoke went out to drag her into the harbor.

While the barge Menominee was being towed up the river the Halstead bridge tender swung the bridge before she cleared the draw, carrying away her mainmast and breaking the spar in three pieces.

The big steamship Susquehanna arrived from Buffalo Tuesday afternoon. Captain Hogg reports a large three-masted topsail schooner, with hull painted black, ashore on North Fox Island. She was heading out with her stern in the breakers, and was loaded with either coal, grain, or ore.

The schooner Penobscot, with lumber from Muskegon, arrived in port Sunday evening at 6 o'clock, in command of Charles Hanson, the first mate, who reported that when about sixteen miles off Muskegon at 8 p. m. Saturday, the captain, Charles Johnson, fell overboard and was drowned. The captain was wiping the glass of the binnacle with his handkerchief when a heavy sea struck the schooner, causing her to roll over to port, the captain lost his footing on the icy deck, fell backwards on the rail and then overboard, Carl Rasmuson, who was at the wheel, shouted to the mates and crew who were all forward, fastening the foreboom, who went aft as soon as possible, but nothing could be seen of the captain. The schooner lost about 30,000 feet of her deckload, also her stay sail and split her main sail and jib. Captain C. Johnson was about fifty years of age, a single man, and resided at Milwaukee.

The schooner Ida, Captain M. Jacobson arrived here Sunday, having been driven back by stress of weather. She left this port at 2 a. m. Friday, light for Whitehall, to load lumber and got to within 10 miles of the latter port when the gale struck her, when in mid-lake Saturday evening, at half past six Gabriel Gabrielson, one of her crew was washed overboard by a heavy sea and drowned. He was about 29 years of age and resided at Whitehall and leaves a widow and one child. The same sea that washed poor Gabrielson overboard also stove in the cabin windows and a portion of the bulwarks and washed overboard all the ropes which were on top of the cabin.

The steamship Tioga, sixty hours overdue, arrived here Monday afternoon, having weathered the storm under the lee of the Manitous. Captain Robinson says he encountered a gale from the southward Friday evening and let go the anchors in the Manitou passage. Saturday morning just as he was getting ready to leave he noticed the barometer was lower than he had ever seen it and concluded to remain there. At 2 o'clock in the afternoon the most violent gale he ever experienced set in from the northwest, accompanied by a blinding snowstorm. It lasted until Sunday noon. At 4 o'clock in the afternoon, the weather having cleared up, the Tioga got under way and came to Chicago, bucking a southwest gale and heavy sea during the entire run up Lake Michigan. While she was at the Manitous the steamer Waverly came in for shelter, but before her anchors could be cleared away she paid off into the trough of the sea and drifted onto the beach. When the gale shifted northward the seas floated the Waverly off without other assistance. She was leaking some but her siphons kept her free. The Tioga lost an anchor and fifteen fathoms of chain.

The steamship Montana, captain John Cornish arrived here Tuesday morning. She rode out the heavy gale under the lee of the South Manitous, with her big anchor and 90 fathoms of chain, from 3 p. m. Saturday, until 10 p. m. Sunday. Captain Cornish says the storm was the worst he ever experienced in his many years of active service on the lakes, the wind was so severe that it tore the steering pole forward from its heavy fastenings and smashed it in pieces on the deck and also blowed the eagle on top of the pilot house right around. All officers and hands were kept on duty during the whole time, her captain fearing she might lose her anchor at any moment.

The steambarge J. W. Westcott went out of dry-dock Sunday. It is the intention of her owner to send her to Marine City to lay up.

Captain Comerford, master and owner of the wrecked schr. Blazing Star, arrived here Monday and noted a protest. Tugs have been unable to reach the vessel on account of heavy seas.

WILLIAMS.

FRANKFORT.

Special to the Marine Record.

To-day, Saturday November 19, snowing heavy, and a terrific north gale prevails. Steamers John Dewar, George Sandford departed for Manistee, and remain sheltered there. Steambarge R. A. Seymour, heavily laden with cedar posts departed for Racine. Propeller Wm. Rudolph departed for Platte pier. She was caught in the gale and succeeded in returning to this harbor at dusk. The mate was injured falling into her hold. Tugs Hannah Sullivan and Pottowatomie left this morning for the fishing grounds. The Sullivan returned this afternoon after a terrible experience. Captain Mollhagan says it is one of the worst seas he ever encountered the past 35 years, on her return trip she nearly ran ashore near Point Betsy; owing to the heavy snow they could not see. She was among the breakers, but managed to work out, the seas dashed high over her, smashing cabin windows, washing off her hatches and everything movable on deck, the engineer and firemen stood up to their knees in water, which momentarily threatened to put out the fire, but the pumps kept her clear. She reports, passing a large quantity of pine and hardwood lumber adrift near Sleeping Bear Point, which looked like a deck load of a large vessel.

Point Betsy life saving station, reports that a large steamer bound up was abreast of the station last night, put about and ran for the Manitous. It is thought the Pottowatomie sheltered at the island.

Schooner Dan Maybee is weatherbound here.

Captain Harrison Miller of Point Betsy life station, fears that a lake disaster occurred during yesterday's gale. A quantity of pine lumber and the deck load of a large vessel is washing up to-day, Sunday, also some mast hoops. He thinks it to be from a dismasted vessel, no further particulars.

Captain Nathanial Robbins, superintendent of the 11th district of the life saving station was here Friday inspecting the Frankfort and Point Betsy stations.

In last weeks RECORD the list of keepers were mixed. Captain Thos. E. Matthews commands the new Frankfort station, and Harrison Miller is keeper at Point Betsy station, captain Matthews was the former keeper of Point Betsy but last spring transferred to the Frankfort station.

BURMEISTER.

MILWAUKEE.

When thirty miles off here last Tuesday night the crew of the steambarge New Era discovered the entire interior of her cabin in flames. Through presence of mind, and the use of her hose, the vessel was saved, and reached here.

Captain Louis Letts, an old Milwaukee vessel master, died Tuesday.

ASHLAND.

Monday night the schooner Alice Craig, laden with camp supplies, was driven ashore near Bayfield and went to pieces. The crew escaped in a yawl and landed in a dense forest. A blinding snow storm was raging, and the crew got lost. After wandering about in the woods for hours, with their clothing covered with ice and almost perishing from cold and hunger, the crew, with the exception of Captain Bunker, reached Bayfield and reported that the captain had laid down in the snow to die, having become so exhausted that he could not walk. The others were so worn out that they cauld not help him. A rescuing party was at once organized, and after a long search they found the captain. He was insensible and his limbs were badly frozen. He was brought here, and there are but little hopes of his recovery. The vessel was owned by N. Boutin, of Bayfield, and was valued at $2,500. The cargo was valued at $2,000.

PORT COLBORNE.

The schooner John Magee, wheat laden and bound from Detroit to Oswego, arrived down to-day. In making the harbor during a gale from the southwest and a very heavy sea, the vessel struck the bottom twice which caused her to leak so that they were afraid it would be necessary to unload the cargo here, but a diver succeeded in stopping the leak so that the vessel proceeded on her voyage. The captain says he was standing in on the range and about a quarter of a mile off the lighthouse when she struck. The barge E. Harmon, which is ashore on Point Abino, is reported to be broken in two and fast going to pieces. The barge Ark, which is ashore here, was in a fair way of being released.

SAULT STE. MARIE.

There is eleven feet of water in the forward hold of the steamer Cuba, aground in the Neebish Rapids, in the Sault river. It is thought that her cargo of 56,000 bushels of wheat is uninjured, as the vessel's steam pump keeps the water bottom free.

The steamer Yakima went aground below Topsail Island, four miles east of Sault Ste. Marie, and was lightered.

MANITOWOC.

The new passenger propeller that is being built here for Seymour Bros. of Chicago, is to be 170 feet keel, 30 feet beam, and 12 feet hold. She will run between Chicago and Harbor Springs, making two round trips each week, and touching at Ludington, Manistee, Frankfort, Traverse City, Elk Rapids, Charlevoix, and Petoskey.

The schooners George Boyce and Cheney Ames collided in mid-lake, eight miles north of Sheboygan. The Boyce was loaded with lumber, and bound for Chicago. The Ames was light, and bound for Escanaba. The Ames and the schooner Bertie Calkins left Sheboygan together and an hour later the lookout on the Ames sighted the Boyce, but thought it was the Calkins and did not discover his mistake until it was too late. The damage to the Boyce is the loss of her jibboom, bowsprit, and cathead. She will be repaired here. The Ames lost all her headgear, had nine stanchions broken, sprung her foremast, and her full damage cannot be estimated until a survey is held.

SAND BEACH.

Special to the Marine Record.

The following vessels and steamers have sought shelter here the last week:

On the 15th the steamer Nahant, tug Jno. Owen and schooners Michigan and Nicholson, tugs Crusader, M. Swain, Kate Williams, O. Wilcox, steamers Ohio, A. J. Wright, and Missoula.

The Missoula struck a log about three miles outside the harbor, and broke two buckets off her sectional wheel. She stopped here for repairs. The services of a diver were procured, the two remaining buckets placed opposite each other, and the steamer proceeded on to Duluth with a two-bucket wheel.

On the 17th there were the H. B. Tuttle and one consort, S. E. Sheldon and wrecked schooner Alva Bradley with three steam pumps aboard; steamer St. Louis and two consorts, Araxes and two, Mary Pringle, tugs Mocking Bird, Music and three consorts, Balize and schooner Montgomery, barge Glasgow and four, Rhoda Stewart and three, N. Mills, and four, Temple Emery and four.

On the 17th, tugs O. Wilcox, Balize, Mocking Bird, Edwin Eddy, barge Abercorn and two, steamer Wm. Chisholm, L. Pahlow, Don M, Dickenson, Waldo A. Avery and consort, E. E. Tice, J. C. Gilchrist and consort, schooners Jessie, W. S. Crosthwaite.

On the 18th we had the steamer Wocoken with schooner Pelican, Jas. P. Donaldson and two, barge City of Mt. Clemens, schooner Oliver Mitchell, steamer St. Magnus, tug Niagara and schooner J. C. King, Mary Pringle, Rochester.

The tug M. Swain, on the 20th, brought the stranded schooner A. Boody into the harbor. Captain Ed Torney may well be proud of his achievement in wrecking the Boody. Tuesday morning he started for the wreck with a lighter and three pumps, and was driven away three successive times, but at last got one pump aboard and hawser laid, and one might say, after mining and throwing over 300 tons of ore, pulled the schooner off the rocks, in the face of a northeast gale. Time from the start to the finish, five and one-half days. LUFF.

BUFFALO.

The drydock strike is to be met half way again by a meeting of all shipyard interests of the lakes at Cleveland some time next week for the purpose of combining, not only against the present state of affairs, but further strikes said to be promised, first at Detroit and then in Cleveland in aid of the present strike. The day of meeting is not yet fixed.

On arriving in port last Thursday night the propeller Avon, of the Union line, struck the schooner Middlesex as she lay coal-laden at the lighthouse pier and crushed her badly on the starboard side from foremast to mainmast. She was not damaged so but that temporary repairs enabled her to make her trip to Milwaukee, however, and a survey was held, fixing the damages at $450, which will probably fall on the Avon, though the accident was caused by a current or sudden change in the wind.

There is a report that the barge C. Harmon, ashore on Point Abino, is broken in two. The S. C. Hall has a permit to pull on her.

The underwriters report that the Canadian schooner Glenora, of the Glengarry's tow, with grain from Port Arthur, went ashore at West Point, Lake Ontario, seventy miles west of Kingston. Her crew consisted of the captain, mate, and six seamen: the wife of a seamen, and a cook. The Glenora cost $18,000.

ESCANABA.

During the gale Saturday the ore laden schooners Helena and Genoa dragged ashore, but were released by the tugs Owen and Alpha, uninjured.

Captain Tuttle thinks the schooner Blazing Star will go to pieces. He has abandoned her and will have her stripped.

The schooner E. R. Williams, coal laden, on arriving here reported the drowning of one of the sailors, Henry Roxburgh, about eight miles from Poverty Island. Roxburgh and another sailor were at the foremast unfurling the topsail when he was missed by the other sailor, who sang out that Harry was overboard. The vessel was going through the water very fast, it was very dark, and he was never seen after he fell. Roxburgh was a married man with a home in New York, and shipped at Cleveland this trip. The Williams came to anchor off Peninsula Point that night and lay there until, she parted her chain, losing her big anchor and seventy-five fathoms of chain.

KENOSHA.

Special to the Marine Record.

During the storm of Saturday night a fishing smack of Milwaukee was wrecked one mile south of this place, with the loss of Fred Cleamfoot and Louis Ahlsulde. The bodies have not yet been recovered.

C. A. E.

MARITIME LAW.

COLLISION — STEAMSHIP AND TOW — NEW YORK HARBOR—FOG—DUTY OF TUG TO SIGNAL—DUTY OF TOW WITH WHISTLE TO USE IT—LENGTH OF TOWING HAWSER-APPORTIONMENT.

U. S. District Court, Southern District of New York.

1. A tow may be held in fault for a collision, though without motive power of her own, for a failure to whistle in a dangerous position and a fog, when provided with a whistle, and especially if it is observed that her tug is not whistling.

2. It is gross negligence in a tug, when taking a tow in a fog across the harbor of New York and across the course of outgoing vessels, neither to blow fog signals, nor the whistles which indicate a tow.

3. In a fog, with a calm sea, in the harbor of New York, a towing hawser 400 to 600 feet in length is too long for safety.

4. A steamship must go at "moderate speed" in a fog. Eleven or twelve knots is not moderate speed.

5. The tug Argus was towing the dredge Queen from Gedney's channel to Sandy Hook, on a hawser 400 to 600 feet long. Both were enveloped in a sea fog, but neither the tug, nor the dredge, which was fitted with a steam whistle, were sounding signals. The steamship City of Alexandria, bound to sea by way of the Swash channel, and just entering the fog, which did not extend thickly into the upper bay, had not slackened her speed, which was some 11 or 12 knots per hour. When about 500 yards from the tug, she first became aware of her presence. The tug whistled twice to her, but gave no signal to indicate the presence of a tow, and the steamship being unable to see the tow, obeyed the signal, sheered to port, and ran into and sank the dredge. Held, that the tug was in fault for not sounding whistles of any kind; that the dredge was in fault for not whistling, and also for the length of her towing hawser; that the steamship was in fault for too great speed in a fog. The tug not being a party to the suit, the damages were divided between the steamship and the dredge.

Brown, J.

On the 9th of September, 1886, at about 5:12 p. m., as the steamer City of Alexandria was going out to sea by way of the Swash channel in the lower bay, she came in collision with the libelants dredge "Queen," which had been employed by the government in dredging Gedney's channel. The Queen was then returning from work to lay up for the night at Sandy Hook, and was in tow of the steam tug Argus on a hawser from 400 to 600 feet long. The stem of the steamer ran into the port bow of the dredge, cutting at least half way through her, and causing her to sink almost instantly, to the libelants alleged damage of $85,000; to recover which this libel was filed.

The place of collision is fixed, within a few hundred feet, by the situation of the wreck as afterwards determined, which was found to be about one-fifth of a mile to westward of the junction of the Swash and Main ship channel courses, as laid down upon the chart. The wind was very light from the southwest; the tide slack flood; the weather tolerably clear, toward New York, but with a rather thick fog creeping in from sea. The fog ahead of the steamer so obscured both the tug and the dredge, that they were not and could not be observed by her at a distance of more than 400 or 500 yards. The dredge started for Sandy Hook at precisely 5 p. m. and at the time of the collision, the tug and dredge were proceeding on a course of west by south at the rate of about 3½ or 4 knots.

The City of Alexandria, in going down the lower part of the Swash channel, had gone a little more to the westward than intended, so much so as to pass a few feet to the west of buoy No.—,known as the Palestine buoy, where she sheered one point to starboard. About that time she heard two whistles given her by the tug, and was then first able to discover the tug bearing nearly ahead and partly on her port bow, and estimated to be 400 or 500 yards off. She immediately replied with two whistles to the tug's signal; at the same time starboarding her helm, and soon after, seeing the hawser that ran astern of the Argus to the dredge, immediately put her helm hard-a-port, and stopped and backed her engines, but too late to avoid collision.

The general cause of this collision was, doubtless, the fog in the lower bay. It so obscured the tug and tow, which formed altogether a line of some 700 or 800 feet moving across the steamer's course, that the latter, upon the speed at which she was going, was not able to avoid the tow after it was discovered: But the fog was obvious to both. The steamer is chargeable with knowledge, not merely that vessels were liable to be coming in, but that this dredge, in tow of the tug, was also likely to be coming upon the very course upon which she was coming, on returning as usual from the daily work on which she had been long engaged. The tug and tow were equally chargeable with knowledge that they were running in a fog across the course of steamers going out to sea. Only very shortly before, two other steamers, first the Trinidad, and next the City of Augusta, at intervals of a few minutes only apart, in going out through the Swash channel, had narrowly escaped collision, clearing the dredge by from 100 to 300 feet only. Upon these facts there seems to be very plain faults in all the vessels.

The Argus, which for some reason has not been brought in as a party, was grossly in fault, because being bound to keep out of the way of outgoing vessels on her starboard hand, and having a tow of a length that was dangerous in a fog in such a situation, and moving somewhat across the course of outgoing steamers, she neither blew any fog signals, as required by the statutory rule, nor, more important still, did she blow the signal of three distinct blasts in quick succession, repeating at intervals not exceeding one minute" to indicate that she had a tow, as required by sub-division 8 of the supervising inspectors Rule 10. Rules of 1886, p. 170. Moreover, she gave a signal of two whistles to the City of Alexandria, thus telling her to go astern, without giving the three towing whistles to apprize her of the danger of going astern and across the line of the tow. These faults are so manifest and so important that it is unnecessary to refer to others on the part of the Argus.

2. The dredge must also be held in fault because she was partly in fault for the mode of navigation adopted, and for the absence of all signals of danger. The tug was, in general, subject to the orders of the master of the dredge. Orders were communicated between them by signals as to towing during work; and though, when being towed in at night, the details of navigation were doubtless left mainly to the tug, the latter was still subject to the general orders of the master of the Queen. I think both were responsible, therefore, for the absence of proper signals, upon the principles applied in the case of The Civilta. 103 U. S. 709,702; The C. P. Raymond, 26 Fep Rep. 281. The misconduct of the tug, in neither sounding fog-whistles, nor towing whistles was very plain. The situation and the course of the tug and tow were specially dangerous to outgoing vessels. The dredge had narrowly escaped collision shortly before. She had neither sail, motive power, nor rudder, and could do nothing therefore, to avoid other vessels; but she had a steam engine provided with whistles like the tug. The necessity of whistles was known to her officers, and the matter was spoken of between them, but it was concluded to "let the tug do the whistling:" yet though the tug's omission to whistle was evident, and the danger great, she gave no orders to the tug, nor gave any whistles herself, as she might have done to apprize other vessels of her position.

In the case of the Peshtigo (25 Fed. Rep. 489,) it was held that a tow thus enveloped in a fog should give notice of her position by whistles; and it was so held although the tug was sounding the proper whistles. Much stronger is the case against the Queen, because, knowing that the regulations were being violated by the omission of all fog-whistles, and that her situation and course were dangerous to outgoing vessels, she took no measures to give notice to approaching vessels of the very great danger. While there is no statute nor regulation that in terms requires a tow thus situated to give such signals, there is none that forbids it; and every vessel is bound by the general maritime law, as is recognized by the provisions of Article 24 of the new rules, to give such reasonable notice of obvious danger as the special circumstances may require, and such as are easily within her power to give. This principle is applied in a great variety of forms. The requirement that a sailing vessel shall shorten sail in a fog when going at considerable speed in waters where other vessels are to be expected (The John Hopkins, 13 Fed. Rep. 185; The Rhode Island 17 Fed. Rep. 554, 557, 559 and cases there cited; The Colorado, 91 U. S. 701-702), and that some signal should be given at night to an overtaking vessel astern, (The Oder, 13 Fed. Rep. 272; The State of Alabama, 17 do, 847, 858), may be cited as examples.

The rule applied in the case of Sturges vs. Boyer, (24 How. 110,) that the tug alone is responsible for the damages upon a collision between her tow and other vessels is applicable only where the tow is wholly in charge of the tug, and under her control, as the Wisconsin was in that case. When the tow is manned by her own officers and men, the duty of reasonable skill and care is imposed on her upon the principles above referred to. "The exercise of reasonable skill and care," it is said in the case of The Margaret (94 U. S. 494,) is in such a case, "incumbent on the tow." Regard for the safety of life and property imperilled by collision does not permit the court in this case to overlook the plain neglect of ordinary precaution by the dredge to avoid obvious danger by sounding the whistle to give notice of her position in this fog; or her neglect to give suitable orders to the tug, or independent signals of her own, when the misconduct of the tug in omitting them made such precaution the more imperatively necessary.

Nor can I regard the tow as wholly free from fault in regard to the length of the hawser. In a calm sea, such as existed at that time, and in foggy weather, a hawser was used much longer than upon the evidence I think was necessary. The great length of the hawser added much to the danger. Considering the long employment of the dredge in this business, the officers of the dredge must be deemed familiar with the dangers of a long hawser in a fog, and with the fact that a much shorter one was sufficient in calm weather. I must hold the dredge, therefore, chargeable with fault jointly with the tug for starting with a hawser of such length. The evidence indicates that with a shorter hawser the collision would have been avoided.

3. The City of Alexandria must be held in fault for not going at a "moderate speed" in a fog. There is some conflict as to the amount of fog that prevailed before reaching the tug and tow, and as to the distance northward to which the fog extended; but there can be no question that the tug and tow were in a pretty thick fog, since they could not be seen more than 300 or 400 yards off, and when the tug was first made out, neither the dredge nor the hawser could be seen. Though the bay above the steamer was comparatively clear, the fog in the region of the tug and tow was plain. This alone was sufficient warning to the steamer to diminish her speed. That she was overtaking a faster vessel ahead of her, which had slowed down in consequence of the fog, was an additional notice to the City of Alexandria to slow. Even if this were the case of an abrupt, dense bank of fog, which, upon the testimony is not probable, she had no right to run into the fog bank at full speed. She was bound to slow down previously, because otherwise she could not comply with the rule that requires her to be going at "moderate speed" the moment she is in it. (Marsden Cole. Id Ed. p. 349; Milanese, 4 Asp. Mar. L. C. 218) Computation based upon the time and distance run shows that the steamer must have been going at the rate of at least 11 or 12 knots. She did not slow or reverse until after the tug was seen within 300 or 400 yards, and I have no doubt, upon the evidence, that she was then in such a fog as made full speed unjustifiable. The Nacoochee, 28 Fed. Rep. 462; The State of Alabama, 17 Fed. Rep. 847, 852; City of New York, 15 do. 628.

There is some evidence that would indicate that the first-mate, who was on the look-out, was not specially observant at the moment when the steamer and dredge first came in sight. But I do not think this possible momentary failure on his part contributed to the collision; nor can I regard it as a fault, aside from the general rule requiring moderate speed in a fog, that the steamer did not reverse immediately on seeing the tug, or on hearing her whistles; nor until the hawser was perceived. The steamer had a right to count on hearing the signals of a tow, if there was one. She had no difficulty in avoiding the tug, the only vessel at first indicated to her. I hold her liable for not having sooner slowed down, so as to be running at "moderate speed," as soon as she entered the fog, as I think she was required by law to do. This would have avoided the collision, not withstanding the faults of the tug and tow. Decree for half the damages, and the costs divided.

THE STEEL STEAMSHIP OWEGO.

It appears to be settled that the magnificent new Union line steamer Owego is not to make a trip this fall, but as she is about completed, the following notice will be of interest: She is built for the Union Steamboat Co. and will cost $300,000. Her dimentions are: Length over all, 351 feet; beeween perpendiculars, 326 feet; depth moulded at lowest point, 25 feet 6 inches; beam moulded, 41 feet. The hullis entirely of steel. She has three decks. On the upper deck are houses for officers and crew, steering gear, galley, store-room, mess-rooms, and ice-houses. Metal inclosures surround the hatches, engines, boilers, and companion-ways, to the forecastle. At the bow and stern are solid bulwarks of steel with open rails between. She is rigged as a fore-and-aft schooner. A donkey boiler is placed on the upper deck abaft funnel, and fitted to work cargo, winches, steering-gear, and pumps. The upper deck is of steel with wood covering. The pilot-house is located above the captain's room. The interior of the pilot-house, captain's offices, and mess-rooms are finished with mahogany, highly polished. The second or main deck is of steel, unsheathed, and clear between end bulkheads, excepting machinery inclosures. The between decks are eight feet six inches in height, well lighted with forty side lights and fitted with five large double hatches and ten gangways for handling cargo. The lower hold is subdivided by six water tight bulkheads, forming four cargo holds, the machinery and boiler spaces and two collision spaces. The forward or collision bulkhead extends to the upper deck, forming a forecastle on the main deck, in which is placed the steam windlass. Three of the cargo holds have a third or or op deck. The ship is fitted with double bottom three feet deep, forming a ballast-tank of about 800 tons capacity. She is designed to carry 2,800 tons of cargo and fuel on 15 feet 6 inches draught of water, and with this load to steam 14 knots or 16 miles per hour. The cylinders are 28, 42½ and 72 inches diameter, and 54 inches stroke. These engines are managed from the lower engine-room from the level of the shaft. Steam will be supplied by six boilers, each 11½ feet diameter. The fire-room runs fore and aft between the two sets of boilers, which face each other; each boiler has two furnaces 39 inches in diameter. grate bars six feet long, making about 240 feet of grate surface.

THE PIRATE KING.

SOLO BY CAPTAIN J. CORKER GOULD.

I sail the ocean blue,
And my saucy ship's a beauty.
I'm the pirate king, and few
Can elude my search for booty.

Chorus:—
He's the pirate king, and few
Can elude his search for booty.

On shore a robber I.
Who plunders at his pleasure.
Be the victim e'er so sly,
I trap him at my leisure.

Chorus:—
Be the victim e'er so sly,
He traps him at his leisure.

All men both great and small
Pay tribute to my scheming.
So matchless is my gall,
They half suspect they're dreaming.

Chorus:—
So matchless is his gall,
They half suspect they're dreaming.

Do any seek my trust,
Or woo my lordly favor?
Their bank accounts I bust
Despite their good behavior.

Chorus:—
Their bank accounts he busts
Despite their good behavior.

All men confess my might,
And shun my wrath impending.
The rich cringe in my sight;
The poor their knees are bending.

Chorus:—
The rich cringe in his sight,
The poor their knees are bending.

And now the seas I sail,
Above my ocean cables.
I know no finer tale,
In records or in fables.

Chorus:—
He knows no finer tale,
In records or in fables.

My subjects I shall find
In Dutch and English cities,
Their wealth my pockets lined,
And they learned what my wit is.

Chorus:—
Their wealth his pockets lined,
And they learned what his wit is.

O, wheresoe'er I go,
My fame shall spread its terror!
O, fast my store shall grow,
Of checks made out to "bearer"!

Chorus:—
O, fast his store shall grow,
Of checks made out to "bearer"!

And when of Wall street marts,
Once more I hear the thunder,
Well, then, let timid hearts,
And all men stand from under!

Chorus:—
Well, then, let timid hearts,
And all men stand from under!

CLEAN CASTINGS.

Industries says: A Dusseldorf firm has recently introduced a device for separating the light impurities from molten iron or other metals in the operation of casting, with a view to securing pure and clean castings. The "separator" is placed upon the inlet aperture of the moulding box, and consists of a rectangular casing provided with a number of transverse partitions, dividing the casing into a series of separate chambers, which are in communication by means of openings at the bottom of the partitions. The molton metal, being poured into the separator at one end, is caused to pass through the several compartments in the apparatus before it can enter the moulding box, the light impurities being in this way caused to rise to the surface, and prevented from entering the mould with the metal. As the metal passes from compartment to compartment, more and more of the impurities are separated out, until the metal reaches the inlet to the mould in a practically pure state. Air is also effectually prevented from entering the mould together with the metal. In the second chamber there is arranged near the inlet a round iron rod, which produces ebullition of the metal, causing the impurities to rise to the surface. It is stated that by the use of this apparatus exceedingly dense and pure castings may be produced.

The steamers Continental, N. K. Fairbank and Omaha, with their consorts, all grounded on Grosse Pointe, Lake St. Clair, Thursday, with the ferry steamers Sappho and Excelsior at hand to release them. The steambarge Progress and others were delayed there on account of low water. A black steambarge, lumber laden, with one mast, is hard on at Fighing island, and will have to lighter the most of her cargo.

A NEW STEAM LIFE BOAT.

Messers. Samuda Bros., of London, have designed and built a steam life ship for the South Eastern Railway Company, of London. She will be at once swift and powerful, and will carry with her lifeboats available for shallow water, where the draught of the life-ship will be too great for the occasion. Her dimensions are: Length, 120 feet; breadth, 20 feet, depth, 10½ feet. She is constructed of Siemens steel, has been built for work in the roughest seas, and is divided into numerous water-tight compartments whereby great safety is secured. Her engines, which have been supplied by Messrs. T. A. Young & Son, are compound single-screw engines of 320-horse power and will be capable of driving the vessel at a speed of 12 knots an hour. The steamer is also adapted for towing, and when not employed in the work of saving life, will be engaged in towing or carrying cargo on short voyages. In addition to the two life-boats, she will be fitted with a gun capable of throwing a line and establishing communication, in any weather, with a vessel a quarter of a mile distant. A other valuable appliance with which the vessel will be equipped is a bath, which will be heated from the main boiler, and can be ready at a moment's notice, for the purpose of restoring any persons found suffering from exposure.

The New York *Maritime Register* says: The Nicaragua ship-canal is gaining friends. The scheme is being quietly pushed and is receiving support from many people, who belived that the Nicaragua route is the best for canal purposes and for the stronger reason that they believe the canal should be built and operated by Americans. It is also claimed that this canal can be opened to commerce long before the Panama canal can be completed, and at a comparatively moderate cost. That a canal will eventually connect the Atlantic and Pacific oceans is almost beyond question, and that the United States will as a matter of political necessity have some control over it is certain.

ENCOURAGE SHIPBUILDING.

While cities and towns all over the country are competing eagerly for new industries, and straining every nerve to hold their own in the fierce business competition of the age, is it creditable to the iron and steel manufacturers of this city that the frames for the big steel steamers built here have to be procured in Philadelphia and Pittsburgh? Of course it would not pay to put in costly machinery and carry a heavy stock merely for two or three boats or a temporary demand, but there is no good reason for doubting that the building of iron and steel ships will be a great and permanent industry in Cleveland, increases rather than dwindling from year to year. At least six large metal steamships will be launched from Cuyahoga yards in 1888, and the number is likely to be eight or ten. As lake traffic increases and losses by storms and other causes gradually destroy the older vessels now in use, there will be a growing demand for iron and steel ships, and the lake port will build them which can do the work most easily and economically.

Cleveland has greater natural advantages for this industry than any other city on the lakes, but it will not do to throw away a single point of vantage in such a contest. It is no light matter whether or not an industy capable of furnishing 2,000 of 3,000 men with employment is built up here or at some other port, and since the rolling of all necessary frames, plates, etc., at home would be a great assistance to local builders, every public-spirited citizens must regret that such material is not to be obtained nearer than Pittsburg or even Philadelphia. The Cuyahoga will probably always be, as it is now, the Clyde of the lakes in any event, but its supremacy in the building of iron and steel ships should he forstered and guarded in every possible way.—Cleveland Leader.

VESSELS AT SAULT STE MARIE.

One of the most engaging pastimes at Sault St. Marie is to watch the vessels pass through the great canal. The largest water craft on the great lakes are engaged in the Lake Superior traffic. The cargoes are principally iron ore, copper, grain, lumber and coal, together with machinery and merchandise of every description.

Upward of 8,000 vessels passed the canal this season, and day and night the lockmen are always on duty. Sometimes there is a rush of vessels, and it is said that in such cases the boats are passed through at the rate of one every ten minutes. It requires ten minutes of time to fill the lock which holds 2,000,000 gallons of water lacking a few thousand. Its length is 525 feet, its width 80 feet and from the bottom to the top stone of the wall is 40 feet.

The depth of water at the upper gate allows vessels of fourteen or fifteen feet draught to pass. The gates are enormous structures, as they need to be to hold such a weight of water, turbulently rushing in and beating up against the lower gate—a foaming flood. The opening of the gates is sixty feet and the canal lock often contains four vessels at a time. Enormous as the chamber is, to pack away in it four of the gigantic craft which carry the commerce of the lakes requires skill and calcution.—Detroit Free Press.

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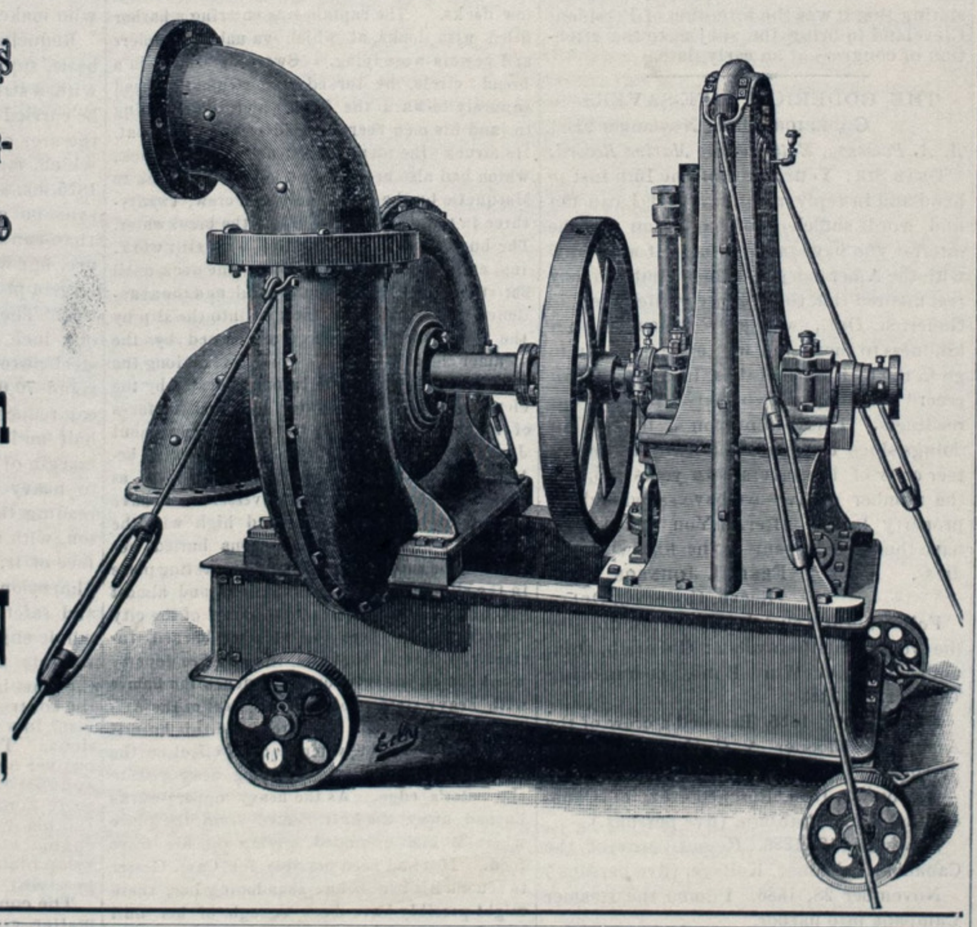

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Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

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CLEVELAND, O., THURSDAY, NOV. 24.

DECK CARGOES.

In a recent number of the New York *Maritime Register* we find a good article on the general average of deck cargoes in case of jettison to save the ship or balance of the cargo, which is appicable at this season of the year. If goods are necessarily thrown overboard, for the purpose of lightering the ship, the loss is to be made good by the contribution of all, because the sacrifice is made for the benefit of all. Such was the provision of the law of ancient Rhodes. From the benefit of this right to contribution the owner of goods loaded above dock is in general excluded; but like most rules this has its exceptions, and of these it is intended to make brief mention. It should be noted that this is a very different question from an action against the carrier for loss of cargo thus stowed. The point here is in relation to the righs of an owner of cargo, stowed above deck, to have his share of contribution from the ship and owners of the cargo under deck in case of necessary jettison.

From the first there has been vigorous objections to the universal application of the rule excluding deck cargoes. It has been urged, especially in cases of large craft that considerable cargo can be carried on deck without hindrance to the movements of the crew or danger to the trim of the vessel; that custom has demonstrated that certain kinds of cargo can be so carried with as much safety and more convenience than below; and that there are considerations in the nature and length of the voyage that make in favor of certain exceptions. Thus Valin, in his Ordinances of the Sea says: "The doctrine excluding deck cargoes, in case of jettison, from general average ought to be controlled by the averages of trade; and accordingly contribution may be claimed for goods thrown overboard from the decks of small coasting vessels or river craft, which usually carry their cargo on deck."

The earliest exception that was engrafted upon the rule was in favor of goods carried on deck in pursuance of custom. This is the "usage of trade" mentioned by Valin. The cases of coasting vessels and river craft, referred to by the elementary writers, are referable to the same test of custom. It goes without saying that the custom must be so general and well known that all the trade are presumed to be conversant with it; there must be more than a practice. The burden of proof in such cases is on those invoking the custom, and evidence which will take an individual instance out from under a general rule of law must be both full and clear. The second exception introduced in England and approved, at least in dicta, in American cases, came with the introduction of steam and was in favor of goods carried on deck of vessels propelled by that power. The question was much litigated abroad from 1837 to 1842 and it was said in a recent case that 'since the decisions during those years, the exceptions allowed elsewhere in favor of goods carried on the decks of steam vessels generally may be regarded as well established there." It is singular, that, so far as we are aware, the question of the validity of the exception in respect of steam vessels as such, aside from custom, has not been squarely before any of the federal courts.

At this day a third exception is allowed in most maritime countries, against the vessel and its owners, where the cargo is carried on deck by virtue of an agreement. But the exception does not extend to contribution from other cargo owners unless they expressly assent to it. The mere fact that they know the ship owner has contracted so to transport cargo, does not bind them to contribution in case of loss, whether their cargo be stowed above deck or below, in the absence of such assent. The contribution in cases arising under this exception goes just as far as the agreement and no further.

The mode of adjustment under this exception was laid down in a recent case as follows: "Where the provision for carrying on deck is inserted in the charter party, the loss for jettison is replaced by contribution between the shipowner and the owner of the deck load. It is adjusted in the same manner as a general average would be but it is a general contribution. Payment by general contribution is enforced from no one who has not, by express contract, made himself a party to the stowage on deck. If there are on deck, goods belonging to a third party, such party is not held liable to pay any share in the contribution. No insurer is asked to replace what his assured has contributed unless there is a clause in the policy assenting to deck shipment. The principle to these adjustments is that as between the assenting parties to such stowage, the deck must be taken to be the proper place for such stowage, which is thence to be treated as if stowed below; but as regards all parties who have not thus assented, the old rule remains in force and from those there is no general average."

THE Maritime exchange some time ago adopted a resolution in the interest of life and property at sea. It was proposed to ask President Cleveland to invite representatives from all the maritime nations to meet in consultation for the purpose of establishing a more uniform system of fog signals than is now in use. Suggestions of all kinds have since been received by the exchange, and one was received from Secretary of State Bayard, stating that it was the intention of President Cleveland to bring the subject to the attention of congress at an early date.

THE GODERICH LIFE-SAVERS.

GODERICH, ONT., November 21.

A. A. Pomeroy, Editor of the Marine Record:

DEAR SIR: Your favor of the 15th inst to hand and in reply must say that I can not find words sufficient to thank you for the interest you have taken in myself and crew with the American government, but you may rest assured that the volunteer life savers of Goderich, Ont., will ever remember your kindness to them, and will ever be ready to go to the assistance of those in danger. Our record for the past two years will show our readiness. I have sent you a list of our doings since I commenced with this volunteer crew of life savers, two years ago, and the number of lives we have saved and the property looked after. You will kindly have the medals sent to the following address,

FRED H. JOHNSON,
Reeve, Goderich, Ont.

Following is a sketch of the work done by the volunteer life-savers at Goderich, Ont., under Captain Wm Babb, commencing October, 2d, 1885:

December 9, 1885. Rescued a crew of the American schooner A. C. Maxwell, (seven persons.)

October 23, 1886. Rescued crew of Canadian schooner Rathbun, (five persons.)

November 18, 1886. Rescued crew of the Canadian schooner Kolfage, (five persons.)

November 28, 1886. Piloted the steamer Campana into harbor.

September 10, 1887. Assisted and piloted into harbor the American schooner Taylor.

October 25, 1887. Sighted flag of distress, ten miles off; blowing a moderate gale. Proceeded to the place and on arrival found an abandoned vessel, with cargo of lumber, which proved to be the American schooner Norris. Stayed by vessel all night, and brought her to a port next day with most of the cargo saved.

October 25, 1887 Sighted a sunken vessel four miles out, and on arrival at vessel found no one; proved to be American scow Lady Elgin.

I think every man who follows the lakes, no matter to what nationality he belongs, should try to get the Canadian government to place a permanently-paid crew at Goderich, Ont., for there has been a number of wrecks around us this fall, and my crew are getting discouraged for the usage they have received. Yours,

CAPTAIN WM BABB.

STEAMER ARIZONA BURNED.

MARQUETTE, MICH., November 17.

The 17th of November seems to be a fatal day at Marquette for marine interests, especially for marine insurance companies. Just one year ago to-day the heaviest marine loss of last season occurred in the wreck of the Wallaces while trying to enter Marquette harbor in a terrible gale, and now comes the heaviest marine loss of the season of 1887 in the total destruction by fire of the steamer Arizona. After lying in the harbor here for over twenty-four hours waiting for weather, the Arizona left for Portage lake on her last trip of the season. She had got as far as Big Bay point when the wind came with fury from the northwest and such a terrible sea set in that she was compelled to turn about and run for Marquette again. At about half-past 3 o'clock this morning she was five or six miles from Marquette, laboring heavily in the high sea, when a carboy of acid was broken, filling the space between decks with dense and stifling fumes, and setting fire to the steamer. The deadly, poisonous fumes of the acid made it impossible for Captain George Graser and his crew to fight the fire, and his engineers and firemen were soon driven from the engine room and fire hold. The chief engineer was the last man to leave his post when half suffocated by the sulphurous fumes and acid smoke from the burning acid. He turned on a full head of steam, and then rushed out to join the rest of the crew on the upper deck. The engineers superintended the making ready of a boat, choosing the windward side to avoid the dense smoke pouring from the hold. There were 900 barrels of oil and acid among the cargo. Captain Graser stood with the man at the wheel and the entire crew huddled together on the upper decks. The space between the decks was filled with flames of blazing oil and fuming acids. As she neared the harbor the alarm blasts of her whistles gave notice to other vessels that something was wrong, but as the flames were still closely confined within the steamer, it was supposed that the Arizona was calling for a tug. As she swept around the breakwater, however, the fire blazed out from her sides, and as the red glare shone over the bay, the steamers at the docks, the shop whistles ashore, and the city bells began sounding a general alarm, while the steamers China and Nyack lowered boats to pick up the Arizona's crew. Although Capt. Graser and his crew had escaped being burned on the open lake, they were in almost as great peril in the harbor, in charge of a burning ship, which was rushing on at full speed without an engineer or man below decks. The captain was entering a harbor filled with docks, at which valuable steamers and vessels were lying. Sweeping around in a broad circle, he turned the steamer's head squarely toward the breakwater, determining to land his men there instead of using the boat. He struck the pier just ahead of the Nyack, which had also been compelled to run back to Marquette by the storm, and the crew, twenty-three in number, leaped upon the breakwater. The burning steamer's engines were still working, and her nose was fast up to the dock until her rudder swung her stern around, and the abandoned vessel shot along the pier into the slip by the waterworks. The crew chased by the steamer had to run for their lives along the breakwater to keep from being suffocated by the clouds of smoke which later blistered the faces of the firemen belonging to the city department Just squeezing through the narrow opening between Burtis' dock and the breakwater there, as if she had stuck, the runaway vessel would have burned an immense dock piled high with the choicest pine lumber, the Arizona buried her nose in the sand and found her last resting place in the slip among the sawmill logs and almost touching the big steam pump house of the city waterworks. There the steamer burned furiously, although tugs and the city fire department did all in their power to quench the flames with heavy streams of water. Part of the Arizona's cargo was oil in barrels and this burned so fiercely that the water had no effect on the fire whatever the steamer being destroyed to the water's edge. As the heavy upper works burned away the hull floated from the place where it had grounded, giving the fire more food. If it had been possible for Capt. Graser to scuttle his boat before abandoning her, there might possibly have been enough of her hull left to warrant her being rebuilt. For fully an hour after she grounded among the logs in the slip, her engines continued to run even after the smoke stack had fallen, the churning of her wheel in the shallow water adding to the confused roar of the oil-fed flames. It was a thrilling scene, the roar of blazing oil, the rush of escaping steam, the crackling of burning timbers, and the whirr of the engines, combined to make the destruction of the Arizona an event never to be forgotten. Dense clouds of black smoke poured all day long from the slowly consumed hull, while the oil in the forward hatch made a blaze that torrents of water could not dim. It was not until evening that the hull filled with the water and sank, and even then the fire did not cease, for much of the boat was left above water, and is filling the sky with light to-night. The Arizona was built in Cleveland in 1865 and was owned by the Anchor line. She was rated A2, valued at $40,000, and is not insured. Her cargo consists chiefly of merchandise, besides which she had on board 1,000 barrels of cement, 1,000 boxes of candles, 900 barrels of oil, a lot of tarred building paper, a large consignment of expensive milling and mining machinery, and a lot of mixed acids consigned to the Hancock chemical company for use in making high explosives. The total loss on steamer and cargo will closely approximate $150,000. The crew of the Arizona certainly did everything in their power to save their vessel and her loss is through no fault of theirs. It is certain death to inhale the fumes of the acids which formed a part of the cargo and it is not many seasons since the mate and two of the crew of the steamer St. Paul met their death in this way at Detroit.

FAST BOATS THAT ARE SLOW.

There have been various attempts this season to produce high speed launches, and a good many who have undertaken the task have been disappointed in the results. The vessels have been anything but fast, and the projectors of some of them do not know why. They fancy that speed is to be obtained by a bow which looks sharp, and a stern which looks fine, and that if an engine of some size is only put in, the boat will get up and go itself. This is a bald statement of facts in most cases, and it is hardly necessary to say that without due appreciation of the difficulties to be encountered fast boats will not be made. Without going into a treatise on the subject of high speed vessels, we may say, succinctly, that the one great trouble with most vessels intended to be fast is weight. The boats themselves are too heavy, and the boilers and engines are too heavy. The pressures, in most cases, are not high enough, and the engines will not develop the power necessary to drive the vessel fast. The average engineer, not accustomed to engines of high speed vessels, would be afraid of them, so light are they. He argues that they are unsafe and will break down, looking at the matter from the standpoint of other engines built to develop high power at low piston speeds. As a matter of fact, the engines of high speed vessels are as durable and serviceable as any other engines if they are properly cared for, but they will not stand abuse and neglect. High powered engines of small dimensions are only obtained by reducing all the details to the lowest possible weight, and this applies to every single piece that goes to make up the outfit. When this is done the results will be as satisfactory in one instance as in another; it matters not who makes the engine, if it is well made.

Reducing this assertion to a practical basis, suppose we have a four-inch piston with a stroke of six inches; the pressure to be carried is 150 lbs. per square inch. Then the area of four inches is 12½ inches (12.56), which, multiplied by the pressure, gives us 1875 lbs. as the greatest dead load which can ever be got on the piston. This is more than can be got by the mean effective pressure, but we will let it go at that. Now, how large a piston rod do we need for such a piston? The average man, guessing at it, says one inch, to be on the safe side. Well, a steel piston rod, one inch in diameter, will stand 70,000 lbs. before it will break, so we can reduce the dimension of this detail to half an inch in diameter with a very large margin of safety. The practical man, used to heavy work and slow speeds, says, on reading this assertion, that a four inch piston, with a half inch rod, is nonsense on the face of it, but this is where he errs, for the dimension named is amply large for strength and safety. Now, if we go through the whole engine in the same way we shall find weights that can be taken out without in the least interfering with efficiency, but, on the contrary, insuring the very thing we want in a high speed vessel of small dimensions. The four-inch cylinder should not be over one-fourth of an inch thick and the cylinder heads should be the same, with a corresponding reduction all the way through. In this way it is possible to make a small engine at a high rate of piston speed develop high power, and in no other way is it possible.

The conditions involved cover the whole matter, and since everything is to be sacrificed to obtain high speed, the engine and boiler must be designed to meet such conditions. The hull of such a boat must be a mere shell of the strongest possible construction, and the steam generator must be of such type as will furnish a large quantity of steam with the lowest possible weight of generator, and it is in providing these details that the engineer and designer shows his ability.—*Mechanical Engineer.*

LAKE CARRIERS' ASSOCIATION,

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARCTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

BOARD OF MANAGERS, 1887.

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MARINE RECORD—OFFICIAL PAPER.

STEERING REGULATIONS.

BUFFALO, November 23, 1887.

At the last annual meeting of the U. S. board of supervising inspectors of steam vessels, in January, 1887, an order was passed requiring all steamers on the lakes and seaboard to have their wheel chains so rove that when the wheel was put to port the vessel's head should go to starboard, and when the wheel was put to starboard the vessel's head should go to port. This order, changing without notice the steering gear on a large number of steamers, caused great dissatisfaction, active measures against it were taken, and in March all penalties under the order were ordered waived until the next meeting of the board, January 18, 1888. The order is believed, by this association, to be in opposition to the uniform mode of steering on government vessels, and on vessels in the ocean and coastwise service. On the lakes there is considerable diversity. In order to get some reliable statistics as to how steam vessels on the lakes now steer, each member of the Lake Carriers' Association, and each vessel man to whose notice this may come, is requested to send to the secretary of the association at once:

First, A list of the steam vessels owned or operated by him which steer in conformity with the order, noting which ones, if any, were so changed this season, in compliance with the order before it was suspended.

Second. A list of the steam vessels, owned or operated by him, which steer contrary to the order, or in the manner common on sailing vessels.

They are also requested to state whether, in their opinion it is preferable (1) that the order should be simply rescinded, and no action taken terding to uniformity of steering; or (2) that the order should be enforced as passed, due notice being given, or (3) that a new order should be passed, requiring all steam vessels to steer in the same way, but in a way opposite to that above described.

Owners of vessels registered in the Cleveland (Cuyahoga) district need not furnish statistics as to how their vessels now steer, as information concerning this district will be obtained by the Cleveland Vessel Owners' Association.

FRANCIS ALMY, Secretary.

Lake shipments of iron from the miens of Lake Superior for the season, to date of the 16th, footed up 4,332,183 gross tons. This is 937,382 tons in excess of the shipments last year at the corresponding date. Some cargoes will yet go forward from Escanaba, but another week will probably see the season closed at these ports. The figures given below show the shipments to the above date this season: Marquette, 795,784 tons; Escanaba, 2,016,675 tons: St. Ignace, 90,188 Ashland, Wis., 1,040,727 tons; Two Harbors, Minn., 388,799 tons; total, 4,332,183. By ranges the shipments have been as follows; Marquette range, 1,736,811 tons; Menominee range, 1,116,832 tons; Gogebic range, 1,089,741 tons; Vermillion range, 388,799 tons.

The propeller Egyptian, which was sunk at Lorain, came to this port for repairs. She has been relieved of her cargo of ore. The damage to her bottom is serious, but not as bad as was at first supposed. Both steam pumps were used in bringing her down.

Captain Thomas Wilson received a dispatch from the captain of the propeller Yakima saying that his boat was released from Topsail reef, and that she proceeded on her way to Duluth.

The schooner St. Lawrence, Captain Doville, has arrived safely at Chicago.

The tug Oswego, from the wrecked Osceola, reports the greater part of the cargo gone and that but little of her outfit can be saved.

Around the Lakes Continued from 1st Page.]

MILWAUKEE.

The propeller Waverly, which ran ashore Saturday on the South Manitous and released herself, again went ashore Monday evening five miles north of here. The weather was hazy, and her captain mistook a light on shore for the North Point light. She is in nine feet of water, is on a rocky bottom, and has three feet of water in her hold. Two tugs with the life-saving crew went to her. She has a cargo of general merchandise from Ogdensburg.

The missing fishing vessel from here was found on the beach at Kenosha, and the life-saving crew found in the lake the body of one of the crew.

The missing steambarge, T. S. Christie, reached Manitowoc all right, and comes here to lay up.

During a heavy northwest gale, reaching a velocity of nearly fifty miles an hour, accompanied by a snow storm which continued all day Saturday, the barges Emerald and Mayflower, lumber laden for Chicago, broke adrift from the steambarge Thos. H. Smith. The Smith took off the crew of the Mayflower, and the life-saving crew rescued the crew of the Emerald. Both vessels went to anchor, but the latter is in danger of going on the beach.

Captain Frank L Vance has sold the schooner Arthur to Toledo parties for $10,000. The Arthur is 318 tons, was built at Manitowoc by Butler in 1873, classed A2, valued at $10,000, and formerly sailed under the name of G. C. Trumpff. She was lengthened in 1885.

Saturday the propeller Waverly went ashore on the South Manitou Island, but was released without damage. Shortly after dusk Monday evening she again went ashore at Whitefish Bay, about five miles north of here. Her captain says he mistook a bright light at Whitefish Bay for the North Point light and headed the boat into what he supposed was Milwaukee Bay. The weather was hazy and he did not see the land until the boat struck. She went on with full force, striking a rocky bottom, and is three feet out. In less than two hours she had three feet of water in her hold. Very little sea was running, and the mate was sent ashore in the boat for assistance. Captain Sweeney of the tug Hagermann heard her signals of distress and went to her, returning for lighters, a force of men, two steam pumps, and hawsers. The Hagermann and Welcome both went to the wreck. The life saving crew accompanied them, although the Waverly's crew are in no danger, unless a heavy gale should spring up. The weather is pleasant and the wind is light from the south.

DETROIT.

The steam barges John F. Eddy, Wyoming, N. K. Fairbank and J. H. Devereux, all very large craft, went hard aground off Grosse point. The water raised slightly and with the assistance of one of the river ferry steamers they were all floated. The F. W. Wheeler, W. H. Wolf, Onoko and Iron King went on later but were released. More vessels have grounded at this point this year than in any two previous seasons.

Captain J. M. Jones, who surveyed the schooner, American Union, places the damage at $1,539.

The schooner Nettie Woodward, sunk at Peche Island, is as far from being liberated as a week ago, on account of bad weather.

The steambarge which stranded on Fighting Island Wednesday night was the S. C. Clarke. She has since been released.

GREEN BAY.

The passenger steamer City of Green Bay burned at her dock. The fire originated near the boiler, and was not controlled until it had destroyed the boat above the water line, the outfit and machinery, and about one-half of a $1,500 cargo of merchandise. The boat had been in port six hours and had received only a small part of her cargo. She was seven years old, and valued at $16,000. The loss on the boat is about covered by fire insurance in the following companies: Orient, $1,500; Phœnix, of Brooklyn, $3,500; Exchange, $1,500; Royal, $1,500; Louisville underwriters, $1,500; Commercial, $1,500.

SANDUSKY.

The passenger steamer B. F. Ferris, while en route from the Islands to this port Thursday, sprung aleak between Kelley's Island and Marblehead and narrowly escaped going down midway between those two ports. She finally reached Marblehead, where her hold filling rapidly extinguished her fires, and she sank to the bottom in about twelve feet of water alongside the dock. She was raised and towed here and will be drydocked.

LORAIN.

The boiler of the wrecked P. H. Walter has been towed to the bank of the river by tug Chamberlain and is found to be in very bad shape. Holes have been punched into it showing that it must have received some very hard blows from the Egyptian and Winslow when they came in.

KINGSTON.

The schooner Glenora, grain laden, from Duluth, was lost by the propeller Glengarry, of Presque Isle, in a gale, by the parting of a tow line. The Glengarry had to come on here with the schooner Gaskin which she also had in tow. A tug went out to look for the Glenora, but had to return owing to the roughness of the water. It is hoped the vessel will turn up all right. She is only two years old and unusually staunch, and cost $18,000. Her crew numbers seven men.

SOUTH HAVEN.

Special to the Marine Record.

Captain John Martel, shipbuilder, of Saugatuck, is building at South Haven, for H. Williams, of St. Joseph, a steamer of excellent model expressly for the passenger and freight trade between South Haven and Chicago. She is 152 feet over all, 28 feet beam, 10½ feet depth of hold. Henry Bloecker & Co., of Grand Haven, are building the engine for her a 24 by 28 and Johnson Bros., of Ferrysburg, the boiler of steel 8½ feet shell, 16½ feet long. WILLIAMS.

NEW PROVIDENCE WINDLASSES.

During the trying seasons of the year, when fall gales prevail, vessels should have machinery which can be implicitly relied upon. It is held by many during the days of summer that a windlass is a small part of the furnishing of a vessel, but when the cyclones sweep the lakes a different feeling is expressed and then if the master of a vessel can not rely upon his windlass he looks around for one in which he may have confidence. In order to find such a machine he does not have to look very far, inasmuch as the favorite Providence has been placed on almost every boat launched during the last few years, and not a faulty one has yet been discovered. The work done by the Providence windlass is quietly and perfectly performed.

The following is a list of orders taken by the American Ship Windlass Co., for the Providence windlass and capstan, since their last report, September, 29, 1887:

Tug Joe Bartram, Boston Tow-boat Co., a Providence pump brake windlass, new style, forward, and a Providence steam gypsy end aft, for taking in slack hawser.

Tug Resolute, Oregon Pacific R. R. Co., Yoquina, Oregon, a Providence steam pump brake windlass

Barge Lizzie H., G. M. Winslow & Co., Boston, a Providence steam capstan windlass.

Barge Soo Loo, Boston Tow-boat Co., a pair of engines for driving windlass and pumps.

Barge Antelope, Boston Tow boat Co., for driving windlass and pumps.

Barge Abby Dunn, McWilliams Bros., New York, a Providence friction pump brake windlass.

Barge Fairy Bell, McWilliams Bros., a Providence pump brake windlass, new style.

Bark Lapland, Boston, a Providence pump brake windlass, new style, to replace a Bath windlass manufactured by T. W. Hyde.

Steam yacht, building by N. E Shipbuilding Co., Bath, Me., for Mr. John W. Slater, a Providence steam pump brake windlass, and Emery & Cheney elastic chain stoppers.

Steamer Wells City, New York, a Providence messenger chain pump brake windlass, to replace an English windlass, broken down.

Schooner, building at Seattle, Washington Territory, a Providence capstan windlass, with T. J. Southard's messenger chain arrangement, furnished through Southard & Co., New York City.

Two Providence steam capstan windlasses, new style, for steamers building for Hawgood & Avery, West Bay City, Mich.

Steamer, building by Simon Langell, St. Clair, Mich., a Providence steam capstan windlass, new style.

For steamer building by Milwaukee Ship yard Co,, for Captain Berriman and others, a Providence steam capstan windlass, new style, and a Providence steam capstan.

A Providence capstan windlass, G. D. Norris, & Co., Milwaukee.

A Providence pump brake windlass, new style, for steamer building by Wm. Dulac, Mt. Clemens, Mich.

Transfer steamer, building by Detroit Drydock Co., four Providence steam gypsy ends.

Steamer building by T. W. Kirby, Grand Haven, Mich., a Providence capstan windlass, and Emery & Cheney chain stoppers.

The following circular has been issued from the office of the Manton steam steerer.

MANSFIELD, MASS., October 29, 1887.

DEAR SIR: Having determined not to carry on the business heretofore conducted by me under the name of the Manton Steam Steerer and Windlass Works until a corporation can be formed for the management of the same, you are hereby notified that no one has any authority from me to make any further contracts in respect to said business, nor to collect any sum or sums due or to be due by reason of any contracts heretofore made.

(Signed) GEORGE B ROBERTS, Prop'r.
Manton Steam Steerer and Windlass Works.

RECORD OF VESSEL PASSAGES.

PASSED DETROIT.

DETROIT, Nov. 17.—Morning, up—Omaha Buffalo, Fred Kelly, Tioga, Stafford and consort, Spokane, City of Rome, Oregon and consort, H. E. Packer, Jas. P. Donaldson and consorts, Jas. Pickands, Kasota, A. Everett, Anna Smith and consort.

Morning, down—Oceanica, Northerner, W. H. Stevens, Spinner, and consorts, Geo. Spencer and consort, Elfin Mere and barge, Canisteo and consort, H. J. Jewett.

Afternoon, up—Ira Chaffee, schooners Merrick and Walbridge, V. H. Ketchum, Wocoken, Pelican, Cowie and barges.

Afternoon, down—D. F. Rose and barges, H. S. Pickands and consort, Salina and barges, Arabia, Ogemaw and barges, D. Leuty and barge, schooners F. C. Leighton, A. M. Peterson, S. E. Sheldon and Alva Bradley, Continental and consort, St. Louis and consort, schooners Ida Keith, St. Lawrence, Pandora, Columbian.

DETROIT, Nov. 18.—Morning, up—Powell and barges, Oscoda, R. P. Fitzgerald.

Morning, down—Chas. J. Kershaw, W. L. Frost, Lycoming, D. C. Whitney.

Afternoon up—Gettysburg, City of Concord and consort.

Afternoon, down—H. B. Tuttle and consort, B. W. Arnold, S. J. Macy and consorts, A. Folsom and consort, F. L. Vance, Bulgaria, Onoko, schooners Ahira Cobb, Francis Palms, Red White and Blue, Typo, F. W. Gifford, Sanilac, Robert Rhodes, Progress, Iron King, W. H. Wolf, schooners R. Halleran, H. P. Baldwin.

DETROIT, Nov. 19—Morning, up—Rochester, Yakima, Albany, Maragret Olwill, Henry Chisholm, Wm. Edwards, Handy Boy.

Morning, down—Raleigh, Bay City, Columbia, F. W. Wheeler.

Afternoon, up—Jim Sheriffs, E. B. Hale and consort.

Afternoon, down—Hecla.

DETROIT, Nov. 20—Passed up, forenoon—Syracuse, Susquehanna.

Afternoon, up—Bay City, Louisiana, Massachusetts.

Morning, down—John B. Lyon, Columbia and consort, Foley and consort, N. K. Fairbanks and consort, Sicken and consort, Cambria, Grand Traverse, W. H. Gratwick, Robert Wallace, New York, schooner John Tibbits.

Afternoon, down—Josephine and consort, St. Magnus, Monteagle, John F. Eddy, Wyoming, Vienna and consort.

DETROIT, Nov. 21.—Morning, up—Fessenden, W. M. Egan.

Morning, down—Aurora and consort, Tacoma.

Afternoon, up—R. J. Hackett and consort, Buffalo, M. M. Drake, Chenango and consort, Wissahickon.

Afternoon, down—S. F. Hodge, Gordon Campbell and consort, Kittie Forbes and consort, Kallyuga, J. H. Devereux, and schooner Huron.

DETROIT, Nov. 22.—Morning, up—Ogemaw and barges, Annie Young, D. F. Rose and barges, Inter Ocean.

Morning, down—W. L. Wetmore and consort, Oscoda, M. B. Grover, Alcona and consort, schooners Oliver Mitchell, Scotia.

Afternoon, up—Oswegatchie, Hiawatha and consort.

Afternoon, down—Kate Butteroni and consort, Kalkaska, Chauncey Hurlbut.

DETROIT, Nov. 23.—Morning, up—Jessie and barge, Commodore, M. M. Drake, Veronica, Elfin Mere.

Morning down—Clarion, A. L. Hopkins, schooners A. Boody, I. H Kimball.

Afternoon, up—Avon, R. P. Rarney and consort, C. J. Kershaw, schooners Annie P. Grover, Ganges.

Afternoon, down—Weston and barges, B. W. Blanchard, Russia, Newburg, Miwaukee, Escanaba, Chicagot G. T. Hope, Clyde. Don M. Dickinson, J. P. Clark and barges, Yosemite and consort.

PASSED PORT HURON.

PORT HURON, Nov. 17.—Morning, down—H. S. Pickands and consort, H. J. Jewett, Ogemaw and barges, Iron King, D. Leuty and barges, Arabia, St. Lawrence, Columbia, Condor, Onoko, R. R. Rhodes, City of Alpena.

Afternoon, down—W. L. Beck, St. Louis and consorts.

Morning, up—L. Pablow, Don M. Dickinson, Wm. Chisholm, E. O. Till, J. F. Eddy and consort, Brown, Montana, Abercorn and barges, Fred Kelly, San Diego, Spokane.

Afternoon, up—City of Rome, H. E. Packer, A. Everett, Jas. Pickands.

PORT HURON, Nov. 18.—Morning, down—W. H. Wolf, C. J. Kershaw, S. J. Macey, A. Folsom and consort, W. B. Arnold, F. W. Gifford, Red White and Blue, Typo, Sanilac, Bulgaria, F. L. Vance, R. Halloran, P. Baldwin.

Morning, up—Philadelphia, City of Mt. Clemens, J. P. Donaldson, Wocoken, Roumania, V. H. Ketcham.

Afternoon, down—Raleigh, Roy, Jno. R. Noyes, J. H. Devereux, Cheney Ames, Reindeer, Robert Wallace.

Afternoon, up—Oscoda, City of Alpena, R. P. Fitzgerald.

PORT HURON, Nov. 19.—Morning, down—Samuel Mather, W. H. Gratwick, New York.

Afternoon, up—Rochester, Albany, Yakima.

Morning, up—J. C. King, E. A. Vickery, Mineral Rock and barges, Columbia and consort, Cambria, Wyoming, D. Richmond, J. B. Lyon, J. F. Eddy, Grand Traverse.

PORT HURON, Nov. 20.—Morning, down—Monteagle, Vienna and consort, St. Magnus, Cheney Ames, Hattie Wells.

Afternoon, down—Tacoma, Osceola, Aurora and consorts, Gordon Campbell and consorts.

Afternoon, up—Atlantic, Syracuse, Wm. Edwards, Henry Chisholm. M. Olwill, E. B. Hale and consorts, Susquehanna.

PORT HURON, Nov. 21.—Morning, down—Kitty Forbes and consort, Comanche, Hartford, Huron, S. H. Hodge, Kalyuga, W. L. Wetmore and consort, Scotia, Mitchell.

Morning, up—H. J. Jewett, City of Mackinaw.

Afternoon, down—Fred McBrier and consorts, M. B. Grover, Kate Butteroni and consorts, Mary Pringle. Mystic, Oliver Mitchell, Toledo, Alcona and consort.

Afternoon, up—Wiley M. Egan, Mary Hattie.

PORT HURON, Nov. 22.—Morning, up—D. Leuty, Buffalo, Montgomery, Conesotoga.

Morning, down—J. H. Outhwaite, Clarion, C. Hurlbut, Kalkaska.

Afternoon, down—Japan, S. C. Britain, G. T. Hope, Vanderbilt, A. L. Hopkins.

SAULT STE MARIE, Nov. 22.—Morning, up—Campan .

Afternoon, up—Peerless.

Afternoon, down—J. H. Farwell, J. H. Rutter, City of Cleveland, Alberta.

Morning, down—Badger State, Starruca, Smith Moore.

PORT HURON, Nov. 28—Morning, down—J. P. Clark and barges, Russia, Milwaukee, Escanaba, Ontario, Chicago, Clyde, M. F. Merrick, Newburg, B. W. Blanchard, A. Weston and consorts, S. Sheppard, Yosemite and consort, Maine and barges, P. Chamberlain, Avon, Germania and barges,

Afternoon—J. E. Potts and consort, Badger State.

Afternoon, up—Inter-Ocean.

THROUGH THE STRAITS.

MACKINAW CITY, Nov. 17.—Morning, down—Schooner Huron and propeller Belle Arnold, schooner Oliver Mitchell.

Afternoon, down—Devereux.

Morning, up—Propeller Russell Sage, T. W. Palmer and consort, J. H Outhwaite, J. M. Glidden and consort.

MACKINAW CITY, Nov. 18—Morning, down—Propeller J. F. Eddy, M. B. Grover, Gordon Campbell and consort.

Afternoon, down—W. H. Gratwick, New York, schooner C. C. Trowbridge.

Morning, up—Propeller W. A. Haskell, Tioga, Fayette Brown.

Morning, down—City of Rome.

MACKINAW CITY, Nov. 19.—Morning, down—Propeller Tacoma, schooner L. A. Law.

Morning, up—Propeller Siberia, schooner J. B. Merrill, propeller Philadelphia, W. S. Crosthwaite, Thos. Howland, Halsted, W. R. Stafford, schooner Higgie, propeller V. H. Ketchum.

MACKINAW CITY, Nov. 20.—Morning, down—Schooner Adventure.

Morning, up—Propeller R. P. Fitzgerald, David W. Rust and consorts, Albany, Ohio, Oregon, P. S. Marsh, Favorite, S. H. Foster.

MACKINAW CITY, Nov. 21.—Morning, down—Schooner C. C. Barnes, propellers Vienna and consort, Havana and consort, propeller Clyde, Chicago, Milwaukee, Escanaba.

Forenoon, up—Propeller Syracuse, Susquehanna.

Afternoon, up—Rochester, H. J. Jewett.

MACKINAW, CITY, Nov 22.—Morning, down—Propeller Portage, Saginaw Valley, John Pringle and consorts.

Morning, up—W. S. Crosthwaite, Pensaukee, Oak Leaf, propeller Leland.

Afternoon, up—Massuchusetts,

MACKINAW CITY, Nov. 23.—Morning, down—Robert A. Packer.

Afternoon, up—Propeller Robert Holland and consort, Conestoga.

THROUGH THE SAULT.

SAULT STE MARIE, Nov 17.—Morning, up—Sitka, C. Tower, Jr.

Morning, down—Jas. Fisk, Jr., City of Traverse, Geo. Nester. R. P. Flower.

Afternoon, down—Kate Butteroni, Galatea, India, K. M. Forbes, Mabel Wilson. Seaman Samuel Mather.

Morning, down—Robert Holland, Fannie Neil, S. M. Stephens.

SAULT STE MARIE, Nov. 18.—Morning, up—United Empire, Australasia.

Afternoon, up—Alberta, H. B. Tuttle, Jay Gould, Missoula, Spokane.

Morning, down—W. L. Davis, Aurora, David Dows, Dominion, Augusta.

Afternoon, down—Cuba.

SAULT STE MARIE, Nov. 20.—Afternoon, up—Regina, W. A. Avery, H. A. Hawgood.

Afternoon, down—Colorado, A. L. Hopkins.

SAULT STE MARIE, Nov. 21—Afternoon, up—Athabasca, Yakima.

Afternoon, down—Ontario, J. J. Hurd.

Morning, down—Japan.

SAULT STE MARIE, Nov. 23.—Morning, up—Dean Richmond, Sitka, Sir S. L. Tilley, G. M. Neelon.

Afternoon, down—Forest City, H. H. Brown, Charles Wall, C. Tower, Jr., United Empire.

PASSED PORT COLBORNE.

PORT COLBORNE, Nov. 17—Passed up—Steamer St. Paul, Ogdensburg to Chicago;

Passed down—Steamer W. B. Hall, Toledo to Toronto.

PORT COLBORNE, Nov. 18—Passed down—Schooners Mary Lyon, Toledo to Ogdensburg; Watertown, Detroit to Ogdensburg; E. P. Beals, Toledo to Ogdensburg; Mystic Star, Detroit to Oswego; Nassau, Detroit to Oswego; propellers L. Shickluna, Toledo to Kingston; W. B. Hall, Toledo to Toronto.

Up—Nothing.

PORT COLBORNE, Nov. 19.—Passed up—Steambarge Tecumseh, Kingston to Detroit; schooner Maggie McCrea, Toronto to Buffalo; W. E. Taylor, Toronto to Toledo.

Down—Schooner M. F. Merrick and F. C. Leighton, Detroit to Ogdensburg; propeller W. L. Frost, Chicago to Ogdensburg; Canada, Buffalo to Dalhousie.

Afternoon, up—Ogemaw and barges.

PORT COLBORNE, Nov. 22.—The gale moderated during last night. The schooner W. R. Taylor, steambarge Tecumseh, propellers St. Paul, Nebraska and Alma Monroe, bound up, left here this morning.

Passed down to-day—Schooner Montcalm, Detroit to Ogdensburg; propeller Monteagle, Chicago to Ogdensburg; Isaac May and consorts, Buffalo to Port Dalhousie.

PORT COLBORNE, Nov. 23.—Passed up—Steambarge Niagara, Toronto to Buffalo.

Down—Propeller St. Magnus, Port Arthur to Kingston.

AN ANCIENT MARINER.

Probably there is no more familiar figure in this port, to vesselmen in general, than the tall, slightly stooping form of Captain Harvey Hall, now doing duty as weighmaster and tallyman at the elevators. Masters, old and young, all seem to know him, and all have a kindly word for the man who was a captain before the majority of them were born. Captain Harvey Hall was born in Chautauqua county, New York, early in 1821, and is nearly 67 years old, but still very active. He "followed the lakes" from the time he was 14 years old until 1865, a period of thirty years. He was a mate on the 62 ton schooner Neamiah Hubbard in 1835, when Captain Brown commanded her, and helped load the first cargo of wheat ever taken from the then little known Chicago. The vesse was thought to be quite a large one in those days, and her capacity of about 7,000 bushels was considered enormous. On the trip referred to she took all the wheat there was "on the dock" at Chicago, and the method of loading was peculiarly primitive. Farmers of Cook and adjacent counties in Illinois had been told that a vessel was loading a big cargo of wheat at Fort Dearborn (Chicago) for "down east." The population of that place was then a scant 1,000, and the town had been organized two years previously, and the first city charter embracing the name of Chicago was adopted two years later. The farmers flocked into the precincts of the fort in great numbers, with loads of wheat, in sacks, and drove (each wagon in its proper turn) on to the little dock which was the sole wharf of the port. The crew and farmers took the sacks on their shoulders and carried them on the vessel, piling them up "crossways," six or eight at a time, on a platform scale, and, after the weighing, dumping them into the hold of the vessel. The amount of wheat taken on in this manner, at this time was nearly 6,000 bushels, and the loading process occupied nearly eight days—an amount which the captain said, "we handle in about as many minutes now!" Six years after this, in 1841, he assumed command of his first vessel, the sloop Emma, which he sailed until 1843, when he took command of the schooner Elisha Whittlesey. His various commands after this were in the following order: Brig Alert, schooners Petrel, Signal, Excelsior, Rainbow, brig L. A. Blossom, schooners Sea Bird and Bay State, brig Canopus, schooner Corinthian and barks Naomi, Sunrise and Favorite. Of this array of boats the Emma, Elisha Whittlesey, Excelsior and L. A. Blossom dropped out of the lists on account of old age, the Petrel capsized in 1883, the brig Alert was never heard from, the bark Naomi was lost on Lake Michigan, and the final disposition of the Sea Bird, Canopus and Corinthian is not known. The Rainbow, Bay State, Sunrise and Favorite are still in service. At the loading of the Neamiah Hubbard, as the boat was about to leave Fort Dearborn, the news came that a farmer who was coming in with a load of grain had "broken down" on the rough roads, and Captain Brown patiently waited over night to enable the belated agriculturist to patch up his wagon, drive into town and ship his grain. 1837 Captain Hall was a wheelsman on the passenger steamer Washington, but left her on her arrival at Ashtabula, on account of the leaky condition of her boilers and the intense heat of the escaping steam between decks. His brother took his position, and that evening the steamer was burned to the water's edge, and a majority of those on board were lost, his brother being washed on shore in an unconscious condition, but afterwards recovering. Captain Harvey Hall is good for considerable service yet, and is as universally esteemed as he is a hard worker.

It is thought that the cause of all the trouble at the mouth of the Detroit river is a sunken scow.

The elevators at Buffalo are as badly blocked as ever, and the prospect is that they will remain much in that condition for the rest of the season.

The schooner Consuelo, ashore at Port Hope, has been abandoned as a total loss. Her bottom is gone. The vessel has been wrecked twice this year.

ENGINEER CORPS, U. S. A.

Following is a list of engineers U S. A., on the lakes and western rivers with post office address.

BRIG. GEN. AND CHIEF OF ENGINEERS, JAS. C DUANE, Washington, D. C.

BVT. BRIG. GEN. O. M. POE, No. 34 Congress-st. West, Detroit, Mich.

COL W. E. MERRILL, Custom House, Cincinnati, Ohio.

MAJOR SAMUEL M. MANSFIELD, Detroit, Mich.

MAJOR CHAS. J. ALLEN, P. O. Box H, St. Paul, Minn.

MAJOR L. COOPER OVERMAN, No. 89 Euclid ave., Cleveland, Ohio.

MAJOR THOS. H. HANDBURY, P. O. Drawer 132, Chicago, Ill.

CAPT. CHAS. E L. B DAVIS, Drawer No. 7, Milwaukee, Wis.

CAPT JAS. B QUINN, No. 52 Fargesson Building, Duluth, Minn.

CAPT. D. W. LOCKWOOD, Grand Rapids, Mich

CAPT, FREDERICK A MAHAN, P. O. Drawer 185, Buffalo, N. Y.

CAPT. WM. L. MARSHALL, P. O. Drawer 42, Milwaukee, Wis.

FIRST LIEUT. JOHN BIDDLE, St. Paul, Minn.

FIRST LIEUT. HARRY F. H DGES, No 34 Congress-st, West, Detroit, Mich.

FIRST LIEUT. GRAHAM D. FITCH, P. O Drawer 42, Milwaukee, Mich.

SECOND LIEUT. WILLIAM L. SIBERT, Custom House, Cincinnati, Ohio.

C. B. MORTON, Commissioner of Navigation, Treasury Department, Washington, D. C

RECORD OF VESSEL PASSAGES.

PASSED DETROIT.

DETROIT, Nov. 12--Passed up, afternoon--C. Hurlbut, schooner Saveland, Arizona, Queen of the West, Forest City and consort, Sitka, Wallula and consort, Nyack, Colton and consort, Ira H. Owen, Argonaut, R. A. Packer, City of Cleveland, Wag-taff, Cumberland and consort, Sparta and consort, Onoko, schoonerPorter.

Afternoon, down—Omaha, S. Langell and consorts, Rhoda Emily, Republic and consort, Anderson and consorts, H. E. Packer, Nebraska, schooner Newsboy, Rust and consort, Keystone and consort, Manhattan, W. H. Barnum, Iron Age and consort, T. W. Palmer and consort, Nipigon and consort, Russia, R. B. Hayes.

Morning, down—Inter Ocean, Hiawatha and consort, Susquehanna, R. P. Fitzgerald, Wm. Chisholm.

Afternoon—-Massachusetts, Coffinberry and consort, Annie Young, Glengarry and consort, Yakima, Nassua and consort, C. F. Sheffield, Chenango and consort, Jno O'Neil, Prentice and consorts, schooners Merrick, Joseph Paige.

DETROIT, Nov. 13.—Afternoon, up—Chicago, Portage, McBrier and consort, Vienna and consort, G. T. Hope, S. H. Foster, Nassau.

Afternoon, down—Tioga, Lowell and barges, Iron Duke and consort, Vanderbilt, Cheney and barges, schooners Maumee Valley, Colonel Cook.

DETROIT, Nov. 14—Morning, up—Townsend and consort, Iron Chief, Niagara and barges, John Owen and consorts, Robert Wallace, S. C. Baldwin and barges, Japan, N. M. Mills and barges, Glasgow and barges, J. H. Devereux, Nahant, Music and barges, schooners Halsted, Wm. Shupe.

Forenoon, down—Boston, H. Chisholm, S. P. Ely, Michigan and barges, schooners J. C. Cass, A. J. Rogers, H. Fitzhugh.

Afternoon, up—James Fisk, jr., Araxes and barges, Rhoda Stewart and five barges, Temple Emery and barges, schooner Thos. Howland.

Afternoon, down--Ira Chaffe, Louisiana, Justice Field and barges, Mystic and barge, Albany, Veronica.

DETROIT, Nov. 15.—Morning, up—Missoula, Ohio, C. Tower, Waverly.

Morning, down—Syracuse, City of Concord and consort, Louis Pahlow, Brady and barges.

Afternoon, up—Alpena, J. N. Glidden and consort, Cambria, J. C. Gilchrist and consort, Mary Pringle, Don M. Dickinson, Magee, W. S. Crosthwaite.

Afternoon, down—W. M Egan, R. Martini, M. M. Drake, Jim Sheriffs, Kalkaska.

DETROIT, Nov. 16.—Morning, up—R. P. Flower, Autralasia, Horace A. Tuttle, Saginaw Valley, Iron Duke, Hattie Wells, Montgomery.

Morning, down—Wissahickon, S. C. Hall and consorts, Reuben Doud, Juniata and consort, Schoolcraft.

Afternoon, up—Alaska, L. Pahlow, E. S-Tice.

Afternoon, down—S. C. Clark and barge, H. C. Schnoor, Commodore, Avon, Empire State.

SAULT STE MARIE, Nov. 16—Morning, up—China, Queen of the West.

Afternoon, up—R. Morwood, Japan.

Morning, down—St. Magnus, Roanoke, F. L. Vance, Columbia, Comrade.

Afternoon, down—Bulgaria, Raleigh Athabasca, Josephine, Thos. L. Parker, Hecla.

MACKINAW CITY, Nov. 16.—Morning, down Propeller Iron King, Arabia, W. L. Frost, H. J. Jewett, Onoko.

Afternoon, up—Schooner Leland, propellers Cambria, Lehigh, schooner Wagstaff.

THROUGH THE SAULT.

SAULT STE MARIE, Nov. 13.—Morning up—Kaliyuga, Colorado.

Afternoon, up—Pacific, Bessemer, Athabaska, Sir S. L. Tilley, G. M. Nelon, and Gogebic.

Afternoon, down—Jim Sheriffs, Empire State, Campana, F. E. Spinner, J. Godfrey, Shawnee, Otego, H. G. Cleveland, Monitor.

SAULT STE MARIE, Nov. 14.—Afternoon, up—S. F. Hodge, City of Duluth, Favorite, V. Swain, Helvetia.

Morning, down—Alberta, Continental, Magnetic, S. H. Kimball, H. B. Tuttle, Queen City, N. K. Fairbanks, Frank Perew, George Spencer, M. B Tremble, W. H. Stevens, S. E Sheldon, Alva Bradley.

SAULT STE MARIE, Nov. 15.—Morning, up—Fountain City, Forest City, H. H. Brown.

Afternoon, up—Wallula, Wadena, W. L. Davis, Nyack, City of Cleveland, Cumberland, B. F. Bruce, Dean Richmond, Arizona.

THROUGH THE STRAITS.

MACKINAW CITY, Nov 14.—Morning, down—Propeller St. Louis and barges.

Afternoon, down—Schooners Columbia, M. L Higgie, propeller Commodore.

Morning, up—Propeller Robert Rhodes, Havana and consort, New York, Newburg, schooner Ada Medora, propeller Chauncey Hurlbut.

Afternoon, up—H. J Webb, F. A. Georger, propeller Onoko, Ira H. Owen, schooners L M. Mason, M. W. Page, C. Williams, H. E. Packer.

MACKINAW CITY, Nov. 15.—Morning, down—Propeller Northerner, Avon.

Afternoon, down—-Oceanica, Progress, and schooner Annie M. Peterson.

Morning, up—F. W. Palmer and consort, R. Wallace, G. T. Hope, Portage, Iron Age and consort, Keystone and consort.

Afternoon, down—J. H, Devereux, Vienna and consort, Otsego and consorts, tug Samson and consorts, Sparta and consort, Nipegon and consorts, Iron Chief.

STEAMERS OF THE WORLD.

Recent statistics show that the number of steamers existing in the world in 1886 was estimated at 9,960, of an aggregate burden of 10,531,843 tons. In the previous year the number was stated at 9,642, of an aggregate burden of 10,291,241 tons. The world's steam shipping in 1886 was thus distributed: Iron steamers, 8,198, of an aggregate burden of 8,911,406 tons; steel steamers, 770, of an aggregate burden of 32,820 tons; and wooden steamers, 822, of an aggregate burden of 380,655 tons. Of the steamers afloat in 1885, 5792 were owned by the United Kingdom and its colonies, their aggregate burden being 6,505,871 tons. The other countries of the world owned steamers in the following order: Germany, 579; France, 509; Spain, 401; the United States, 400: Norway, 287; Russia, 212; Denmark, 200; Italy, 173; Holland, 152; Brazil, 141; Japan, 105; Greece and Turkey, 82 each; Belgium, 68; Chili and the Argentine Republic, 43 each; China and Portugal, 27 each; Hawaii, 21; Mexico 15, and miscellaneous, 50. From the above figures it appears that, notwithstanding the great depression prevailing in the steam shipping trade, the number of steamers afloat last year increased to the extent of 327 as compared with 1885.

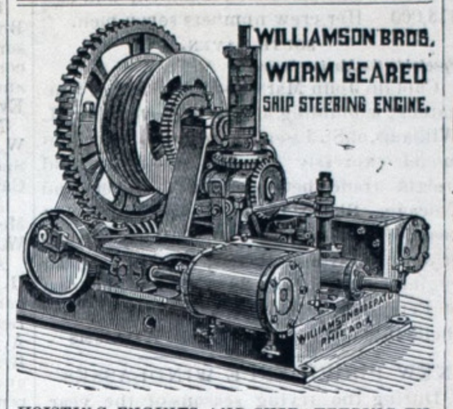
If Captain Bauldry, of the steam whaler Orea, San Francisco, sticks to his resolution to retire from business, he will retire in a blaze of glory. On his cruise just ended, he killed 35 whales, stowed 28 (all he had room for), and brought into port 2,800 barrels of oil and 48,000 pounds of bone—the largest catch on record, ane valued at about $266,880.

ORE FACILITIES.

The necessity of increased facilities for handling ore in this city has long been felt and has been much discussed in the public press and among business men and others; and there is no question that the city is losing heavily in its business interests through the lack of such facilities. From the New York, Pennsylvania & Ohio docks alone there have been driven away during the past season one hundred and fifty vessels or about 150,000 tons of ore. A prominent vessel owner estimates that each vessel loaded with ore discharging its cargo in the city involves the expenditure within the city, in the payment of its crew, the purchase of its supplies, etc., from $1,000 to $1,500, which would find its way into the channels of trade of the city and benefit in some measure all branches of business. This is only one of many ways in which the business of the city loses in this connection. Several months ago the New York, Lake Erie & Western R. R. Co., lessee of the New York, Pennsylvania & Ohio R. R., was memorialized by business men of the city, including vessel owners and those engaged in mining and handling iron ore, on the subject of increasing its ore dock facilities here and the necessity of the same was very strongly urged; and the company has shown a disposition to make large improvements if the city will grant the right to occupy portions of certain streets to afford necessary track room, and the proprietors of the road can be induced to furnish the necessary funds for the purpose.

THE MOST INTERESTING MARINE NEWS,

Concerning directly every sailor after navigation closes is how most advantageously, to invest his hard-earned money. Flannel garments being mostly wanted before any other, to give the body an equal temperature, and absorb the perspiration, it becomes necessary to purchase pure woolen fabrics. We, the unersigned, Kohn & Co., of Boston Dry Goods Store, 213 Detroit st., near corner Pearl, Cleveland, O., established since 1866 in this city, have made the manufacturing of *Flannel, Cassimere, Waterproof Shirts*, scarlet *Undershirts* and *Drawers* a specialty, to be sold direct to consumers. Therefore, we are *the only Retailers* in this city who make ☞ genuine *home-made Shirts*, 52-inches wide, 36 to 40 inches long, extraordinarily well sewed, or make them ☞ *to order* ☜ according to the taste of the Customer ☞ *without extra charge*. ☜ Remember this! ☞ We are also constantly prepared to meet the wants of the Vessel trade in the supply of ☞ *Comfortables, Blankets, Table linens, Sheets* for bunks, *Pillow-cases, etc* or any necessary equipments for bedding, which we also ☞ *sew to order at shortest notice.* ☜ ☞ The *Custom merchant tailoring department* ☜ connected with our establishment, and conducted by our son, Jo. L. Kohn, a tailor and cutter, furnishes the nobbiest *Dress, Evening or Business Suit* from $8 to $10 less than any merchant tailoring establishment, for he saves the expense of *extra Rent* and the employ of an *extra cutter*—all done to advertise himself. Kohn & Co., 213 Detroit st., near corner Pearl.



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WANTED—A second-hand marine boiler, 8½ or 9 feet in diameter and 15 or 16 feet long; or Scotch boiler, 12 by 12. Inquire of C. L. FOX, Bay City, Mich

WANTED—Second-hand marine engine, 12 by 13 or 12 by 14. Inquire of LEE S. DELAND, Bay City, Mich.

FOR SALE—A STEAMBARGE—260 tons register, 150 feet keel, 29 feet beam, 12 feet 3 inches depth of hold. Two engines 10 by 26 high pressure, 26 by 37 low pressure, compound twin screws. Boiler 16 feet 6 inches by 8 feet. Steambarge, engine and boiler all in excellent condition. Apply to WILLIAMS, Branch Office, MARINE RECORD, 252 South Water St., Chicago, Ill.

WANTED IMMEDIATELY—A SCHOONER—Of about 40 tons register, of light draft, beam not to exceed 17 feet 10 inches. Apply to WILLIAMS, Branch Office, MARINE RECORD, 252 South Water St., Chicago.

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ANY bills the tugs Dave & Mose and Shoo Fly have against vessels must be settled before February 1, 1888. If not, the vessels will be libeled for said amount. ANDREW A. MILLS, Jr., 765 Jefferson Ave., Detroit, Mich.

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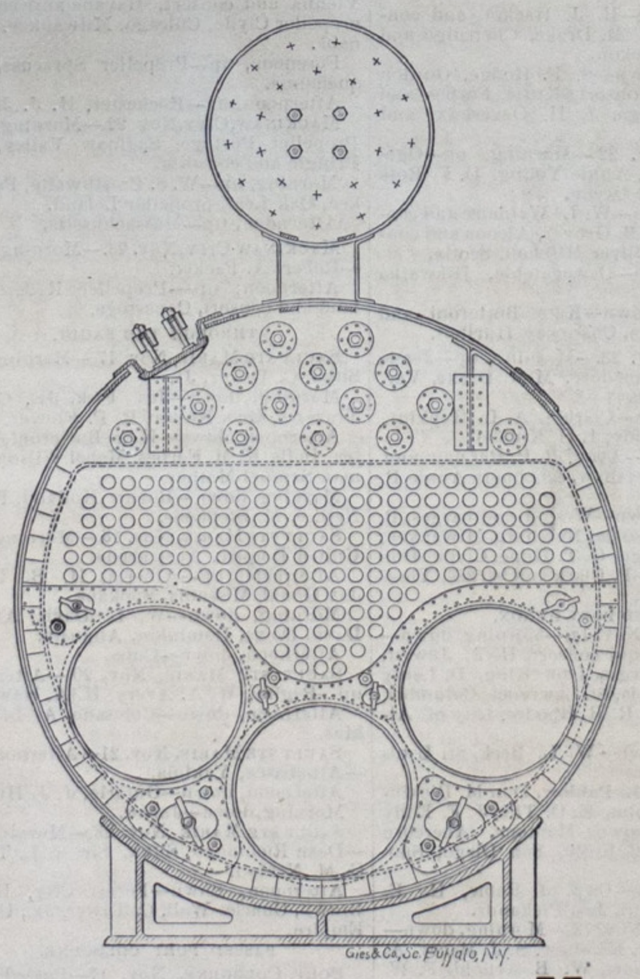

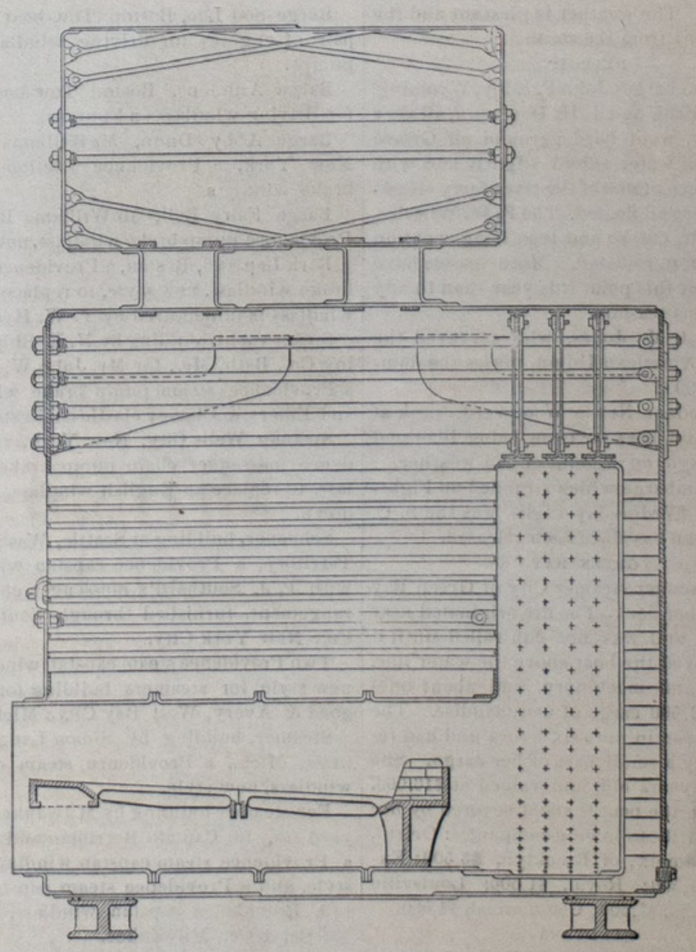

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LAKE SHORE & MICHIGAN SOUTHERN

Commencing Monday, May 16, 1887. The time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*2 55 A M
No 8, N. Y. B & A Express	*8 30 A M	*3 55 A M
No 26, Elyria Accommodation	†7 45 A M	
No 24, Buffalo Ac'm via Sandusky	†10 05 A M	†10 15 A M
No 24, Toledo Accom via Nor	†10 05 A M	†10 15 A M
No, 10, New York & Boston, "F		*11 35 A M
No 12, N Y & B Fast Expr	*2 20 P M	2* 45 P M
No 2, Night Ex via Nor	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	
No 26, Conneaut Accommodation	†4 25 P M	

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 15 A M
No. 23, Cleveland Express	*2 15 A M	
No 3, Chicago Express via "	5 40 A M	5 55 A M
No 25, Mich Accom Norwalk		†5 35 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*10 55 A M
No 9, Chi Pac Ex via Norwalk	*6 55 P M	*7 15 P M
No 31, Elyria ac to Elyria only		†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	

Sunday train for Nottingham—Depart 8:15 a. m. and 1:45 p. m.; returning, leave Nottingham at 8:50 a. m. and 3:45 p. m.
Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.
A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11 35 A M.; arrive Grand Central depot, New York, 7.30 a. m.
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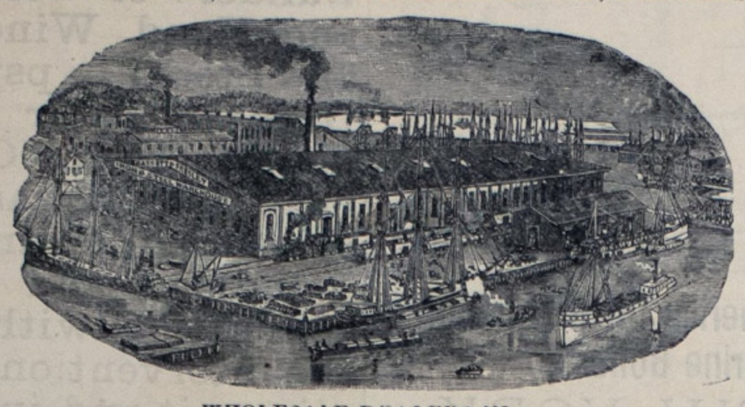

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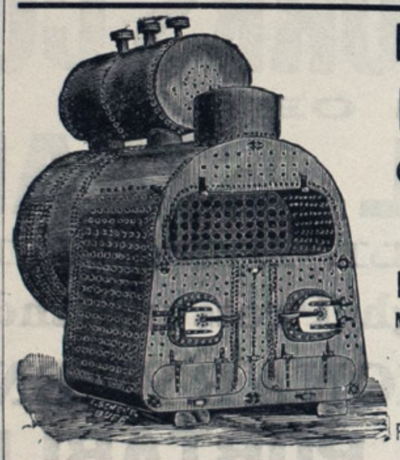

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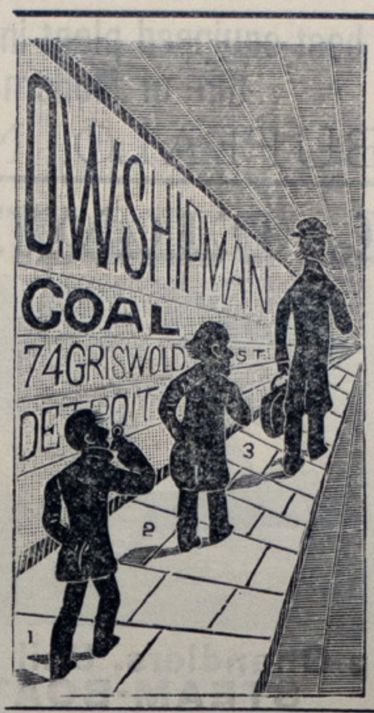

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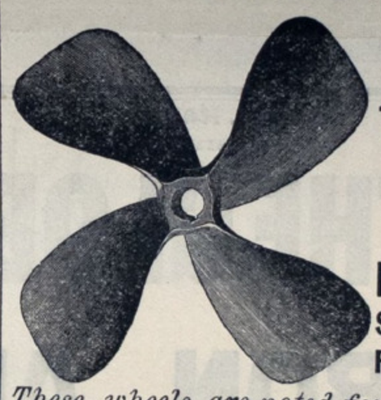

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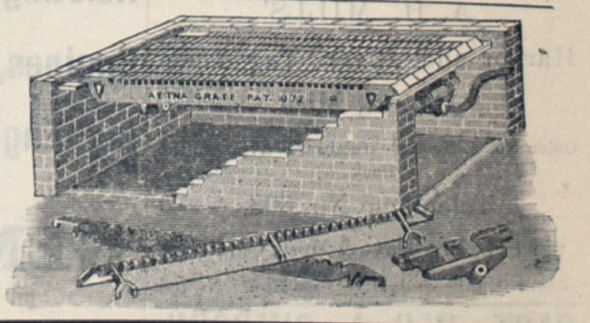

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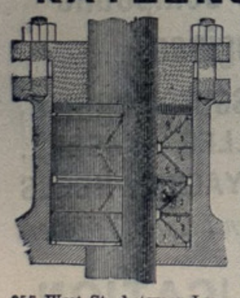

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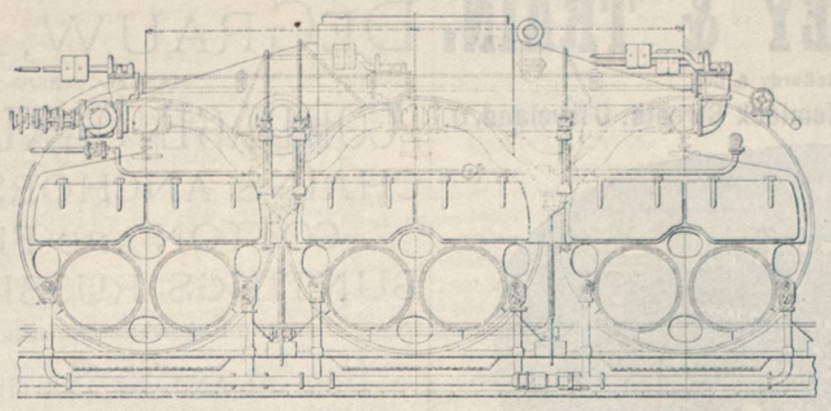

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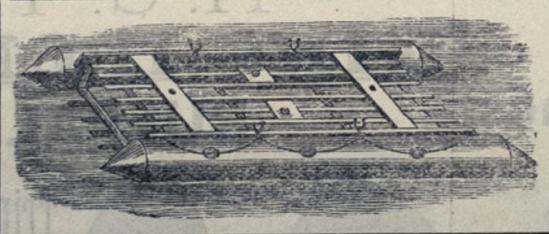

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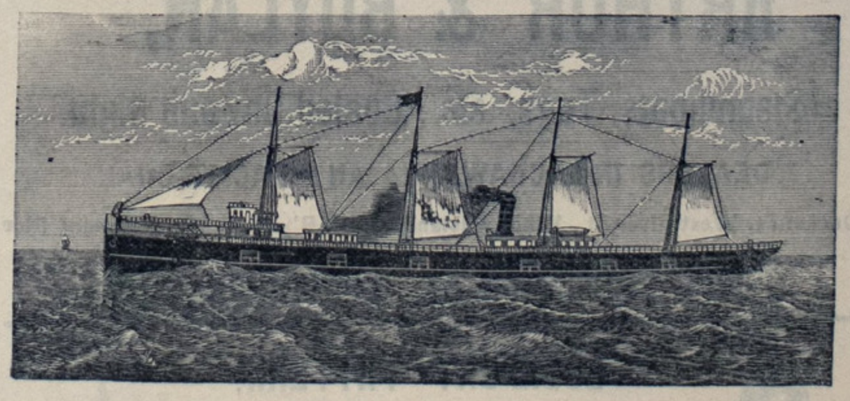

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